DOCUMENT RESUME

ED 307 900 IR 052 791

AUTHOR Bridge, Frank R.; Garcia, C. Rebecca
TITLE Data Conversion. A Fundamental Step toward Library Automation. Participant Workbook For a Workshop .
INSTITUTION Texas State Library, Austin. Dept. of Library Development.
PUB DATE Nov 88
NOTE 162p.
PUB TYPE Guides - Classroom Use - Materials (For Learner) (051) -- Reference Materials - Directories/Catalogs (132)

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS *Bibliographic Databases; *Library Automation; *Library Planning; *Machine Readable Cataloging; Online Systems; Standards; *Users (Information); Workbooks
IDENTIFIERS Authority Control (Information); Barcodes; *Data Conversion; MARC; *Retrospective Conversion (Library Catalogs)

ABSTRACT

This workbook for participants in a 1988 Texas State Library workshop is designed to provide a step by step outline for the full process of bibliographic, item, and patron conversion from paper files to an online environment; to orient participants to various methods and major vendors of bibliographic retrospective conversion; and to provide a working definition of data conversion and related terminology. The following topics are covered: (1) issues in bibliographic conversion, including standards, methods of retrospective conversion, and authority control; (2) tape processing options and item record creation, including systems for labeling individual items; (3) barcoding procedures and patron conversion, i.e., optional ways of labeling items and registering patrons; and (4) planning, procurement, and database maintenance, including sample RFPs (request for proposal) and sample procedures for authority control. Also provided are an outline of tasks involved in a data conversion project; cost sheets for retrospective, patron, and item conversions; and lists of data conversion service firms, OCR label vendors, barcode label vendors, and plastic library card vendors. (47 references) (CGD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED307900

DATA CONVERSION:

A FUNDAMENTAL STEP TOWARD LIBRARY AUTOMATION

A Workshop Series from the Library Development Division of the Texas State Library

3 1326 00567 2468

IR052191

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Anne Ramos
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TEXAS STATE LIBRARY

BEST COPY AVAILABLE

DATA CONVERSION:

A Fundamental Step Toward Library Automation

PARTICIPANT WORKBOOK

A Workshop Presented by

Frank R. Bridge & C. Rebecca Garcia

Library Development Division

Texas State Library

November 1988

Table of Contents

Objectives and Topics Page 1

Issues in Bibliographic Conversion

Standards Page 2
Methods of Retrospective Conversion Page 18
Authority Control Page 20

Tape Processing Options & Item Record Creation

Tape Processing - General Concerns Page 26
Tape Processing Options Page 28
Item Record Creation Page 32
Item Labeling Planning Page 35

Barcoding Procedures & Patron Conversion

Item Labeling Procedures, Process I Page 39
Item Labeling Procedures, Process II Page 54
Patron Registration Principles Page 58
Patron Registration Methods, Process I Page 77
Patron Registration Methods, Process II Page 88
Patron Registration Methods, Process III Page 92

Planning, Procurement & Database Maintenance

Planning Page 93
Procurement Page 99
Sample RFP Page 102
Sample Procedures Page 118
Maintenance Page 124

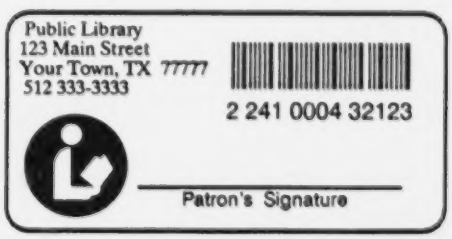
Task Outline Page 128

Cost Sheets Page 132

Vendor Lists

Data Conversion Service Firms Page 138
OCR Label Vendors Page 142
Barcode Label Vendors Page 143
Plastic Library Card Vendors Page 145

Bibliography Page 147



Objectives & Topics for the Workshop

Objectives

To provide a step by step outline for the full process of bibliographic, item and patron conversion from paper files to an online environment.

To orient participants to various methods and major vendors of bibliographic retrospective conversion.

To provide a working definition of data conversion and related terminology.

Topics

What steps precede a retrospective conversion project?

What are different methods of bibliographic conversion?

What are various methods of barcoding collections?

What are different procedures for converting patron records?

What is authority control processing, what are the benefits and approximately how much does it cost?

What are various ways to handle ongoing maintenance of the library database?

Outline

Issues in Bibliographic Conversion

Standards

MARC

History

Results

MARC Format

Leader

Directory

STANDARDS

MARC (Machine Readable Cataloging)

History & Purpose : The MARC project was launched in the mid-1960's by the Library of Congress to:

1) develop a way for libraries to share bibliographic data on magnetic tape
2) develop a method & format for recording complete bibliographic data in machine-readable form.

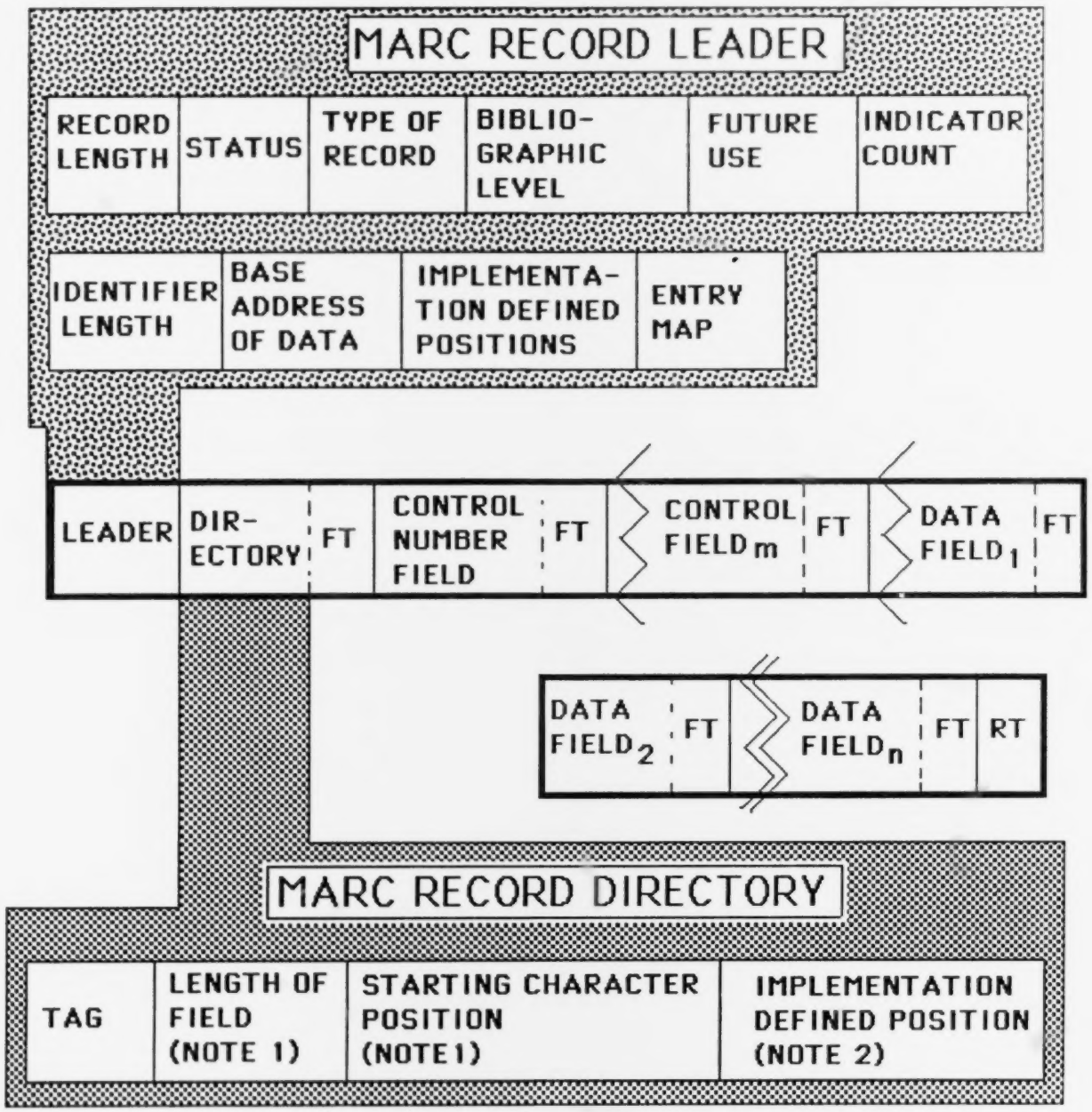
Results: 1) Shared communications format
2) Source of accurate, authoritative records from the Library of Congress.

MARC Communications Format: MARC is designed for communicating information between computers. It specifies the way information is recorded on magnetic tape and is composed of different informational areas such as:

Leader: Fixed length fields containing codes that present information about the work described in the body of the record.

Directory: "Table of contents" to pieces of information located within the record. The directory is of primary importance in processing a record.

MARC TAPE FORMAT



Outline

Issues in Bibliographic Conversion

Standards

MARC

Materials Formats

MARBI

LCMARC vs. Other "MARC's"

AACRII

Issues in Bibliographic Conversion

Materials Formats: Each bibliographic record follows a specific arrangement or "format".

The Library of Congress developed a MARC format for each of these types of material:

*Books
*Serials
*Visual Materials
*Archives & Manuscripts
*Maps
*Music
*Machine-Readable Data Files

Work is being done on one combined format which will take the place of these seven separate ones.

Within each of these materials formats, there are rules which dictate where each item of information will be placed in the record. Numbered "tags" refer to fields of information in the record.

MARBI (Machine-Readable Bibliographic Interchange) : Committee of ALA which defines a series of tagging conventions for the MARC record. Tags identify elements ("fields") of the MARC record. Fields are subdivided into subfield codes which delineate information within the specific tags.

Issues in Bibliographic Conversion

MARC Record : An example of a MARC record as it appears on OCLC:

OCLC: 501356 Rec Stat: n Entrd:721110 Used: 831115
Type: a Bib lvl: m Govt pub: Lang: eng Source: u Illus:
Repr: Enc lvl: I Conf pub: Ctry: Dat tp: M/F/B:
Indx: Mod rec: Festschr: Cont:
Desc: Int lvl: Dates: 1970,

1 010
2 040 ±c CCL
3 090 PS3561.08 ±b P3 1970
4 090 ±b
5 049 OCLC
6 100 10 Kosinski, Jerzy N, ±d1933-
7 245 1 The painted bird, ±c by Jerzy Kosinski.
8 260 0 New York, ±b The Modern Library +c [1970]
9 300 234p. ±c 22cm.

LC MARC

LCMARC is the original MARC record from the Library of Congress. It is now also known as USMARC. This is the standard MARC record for the United States. Other MARC record providers offer records with differing degrees of variation from the LC MARC records. These include:

OCLCMARC UKMARC
CANMARC REMARC

AACRII (Anglo-American Cataloging Rules II) Cataloging Standards

Outline

Issues in Bibliographic Conversion

Standards

Terms in MARC

Full MARC

MARC-like

MARC-compatible

Field Selection

Full MARC, MARC-like, MARC-compatible

"Full MARC " is usually used to indicate that none of the MARC fields have been stripped from the record.

"MARC-like" can be used for many types of records ranging from those which use some type of pre-determined format for bibliographic information to those which have much more stringent specifications to make them very much like MARC records in format and content.

"MARC-compatible" is normally used to denote a MARC record without certain fields. The number and classification of the fields omitted varies.

Field Selection

Creating an online database offers an opportunity to upgrade and standardize years of inconsistencies and variations which have built up in the existing card catalog. When conducting a retrospective conversion project and writing procedures, some considerations which must be addressed are:

*Unique Identifier Match
*Local Information Placement and Documentation
*Fullness of the Record

The following are basic guidelines which were adopted by the Association of Research Libraries for mandatory MARC elements to be included in all records whenever applicable:

Leader:
05 Record status
06 Type of record
07 Bibliographic level
17 Encoding level
18 Descriptive cataloging form
007 Physical Description fixed field
008 Fixed length data elements
06 Type of publication date
07-10 Date 1
11-14 Date 2
15-17Country of publication
23 Form of reproduction
35-37 Language
010 LC card number
016 Canadiana control number
020 ISBN
040 Cataloging Source
1xx Main entry
245 Title Statement
- ±a Short Title
- ±b Remainder of Title
- ±c Remainder of Title page
- ±h Media qualifier
- ±n Number of part/section
- ±p Name of part/section

250 Edition statement
- ±a Edition statement
- ±b Remainder of edition

260 Imprint statement
- ±a Place of publication

±b Name of publisher
±c Date of publication
300 Physical Description
±a Extent of item
±b Other physical details
±c Dimension
±e Accompanying materials
400-411 Series Statement
440 Series Statement, Title Traced
490 Series Statement, Title Untraced or Traced Differently
553 Photo-Reproduction Note
600-651 Subject Added Entries
700-740 Added Entries
800-830 Series Added Entries

These serve as an example of standards for data entry. It is important to consider which fields will be included before beginning a retrospective conversion project.

Outline

Issues in Bibliographic Conversion

Standards

MicroLIF

Is it MARC?

MARC-in

Stored MARC

MARC-out

MARC-based

Issues in Bibliographic Conversion

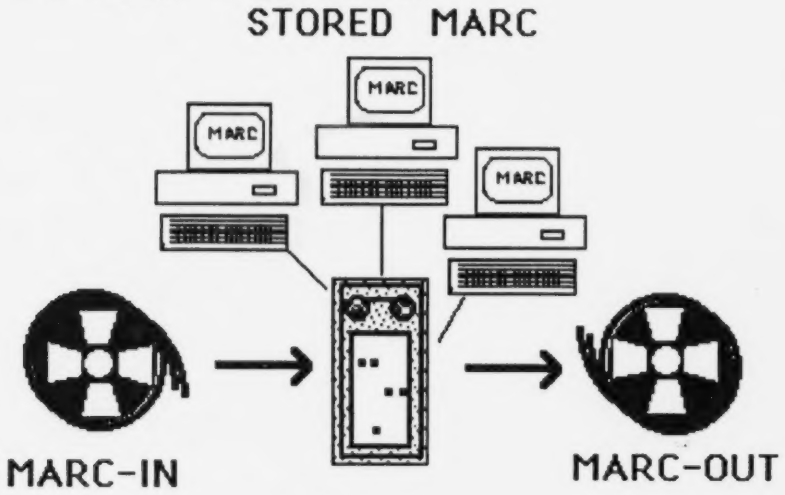
MicroLIF (Microcomputer Library Interchange Format)

This format is a variation of MARC created by book jobbers, publishers and microcomputer library automation vendors that is designed to hold publishing information and to work more easily with microcomputers than MARC.
The MARC header is stripped off with information stored in the 900 fields.
It is not standardized between vendors.
It cannot presently be transferred easily and cheaply into a full MARC record.

MARC-in, Stored MARC, MARC-out, MARC-Based

Library automation vendors refer to being able to load MARC records (MARC-in), store the full MARC record online (Stored MARC), and output a tape of the MARC records that make up your database (MARC-out).
A system is referred to as being "MARC-based" if it uses the MARC record when constructing the accessed fields of data or if it contains any or all of the aforementioned capabilities.

Issues in Bibliographic Conversion



These capabilities are each important:

*MARC-in
The capacity to load MARC records directly can speed up the conversion process by allowing you to begin retrospective conversion using copy cataloging before choosing an automation vendor.

*Stored-MARC
While it is not necessary to store the MARC record in the exact order as it was input, it is best to be able to store any completed fields of the MARC record online.

*MARC-out
It is extremely important to be able to output MARC records from your local system. This assures you the ability to transfer your data to another system in the future as well as offering opportunities to create a MARC-based Microform or CD-ROM catalog.

Issues in Bibliographic Conversion

*MARC-based

This term can be misleading in that a system can be "MARC-based" but still not be able to output a MARC tape. However, any system that can output a MARC tape is a MARC-based system. It is important to ask a vendor if they have a MARC-based system and then to follow-up that question by asking if they can output MARC.

Outline

Issues in Bibliographic Conversion

Standards

Benefits of a MARC system

Transferability

Easy move to OPAC

Standardization

Cost-Effectiveness

Issues in Bibliographic Conversion

Benefits of a MARC-based system

*Transferability

If the system outputs MARC the database is easily transferrable. Since the technological life of any system is about 5 years, it is important to be able to move the database to another system. The database is your most expensive investment in the system and it is important that this not have to be redone due to the inability to output MARC records. Of course, it is also important that the quality of the information contained on the database allow you to take advantage of any advances in library automation software.

*Online Public Access Catalog

If the level of quality of cataloging is maintained on the system, it is easy to create an online public access catalog using the records.

*Standardization

Having a MARC-based system means accepting a standard in the industry and offers advantages of possible resource sharing and future connectivity.

*Cost-Effectiveness

Since creating a MARC-based database is easier than trying to input the data originally, it is the method of choice. Once you have MARC records, it is not cost-effective to abandon the standardized method and create non-standard records from them.

Outline

Issues in Bibliographic Conversion

Methods of Conversion

Online, Shared

Batch, Shared

CD-ROM

Contracted, Customized

Original, Local Input

Combination

Methods of Retrospective Bibliographic Conversion

Online, Shared Cataloging Database

Install terminals to access bibliographic utility in an online, real-time situation.

Batch, Shared Cataloging Database

Use microcomputer to store unique numbers of the bibliographic records(LCCN, ISBN). Send to vendor to search database & create magnetic tape of holdings.

CD-ROM Cataloging Database

Use CD-ROM workstation to access MARC records on CD-ROM discs. Edit and store these on floppies or tape cartridges.

Contracted, Customized Conversion

Send Library shelflist to vendor for retrospective conversion. Original cataloging can be done on "no-hits".

Original Local Input

Use software to format a MARC record and input records locally. Or, use local system alone and add all records through the cataloging facility offered.

A combination of any of the above.

Outline

Issues in Bibliographic Conversion

Authority Control

Examples

- Online
- Print

Formats

Methods of Authority Control

- Batch on Tape
- CD-ROM
- Manual

Authority Control

As with manual authority control, in order for materials to appear together they must be so identified. It is necessary to define how information is to be entered so that when a certain search is run all applicable records are retrieved.

The Library of Congress has separate authority control records for the Library of Congress Subject Headings and the Name Authority headings. These have a MARC format, with fixed fields, tags & subfields.

Example of an authority record online

ARN: 2128996 Rec Stat: n Entrd: 871219 Used: 871219
Type: z Geo subd: i Govt agn:m Lang: Source:
Roman: Subj: a Series: n Ser num: n Head: bab
Ref status: b Upd status: a Auth status: a Name: n
Enc lvl: n Auth/Ref: a Mod rec: Rules: n
#

>1 010 sh 85021407 #
>2 040 DLC ±c DLC +d DLC #
>3 053 SF191 ±b SF199 #
>4 150 o Cattle breeds #
>5 360 ±i names of specific breeds, e.g. ±a Aberdeen-Angus cattle, Hereford cattle #
>6 450 o Cattle ±x Breeds #
>7 550 o Cattle ±w g#
>8 550 o Cattle ±x Breeding +w g #

Issues in Bibliographic Conversion

>9 680 ±i Works on breeds of cattle in a specific locality are entered also under the heading ±a Cattle -- [local subdivision]. #
>10 681 ±i Example under ±a Livestock breeds #

Example of an authority record in print

Cattle breeds (Indirect) (SF191-9)
Works on breeds of cattle in a specific locality are entered also under the heading Cattle - [local subdivision]
sa American Brahman cattle
Angeln cattle
Beef cattle breeds
Crillo cattle
Dairy cattle breeds
East Prussian cattle...
names of specific breeds, e.g.. Aberdeen-Angus cattle, Hereford cattle
x Cattle-Breeds
xx Cattle
Cattle-Breeding

LCSH 10th ed. p. 504

Issues in Bibliographic Conversion

Formats for Authority Records

Authority Records Variable Field Group	Tag Structure
* 1XX Established Heading	* X00 Personal Name
* 4XX See Reference	* X10 Corporate Name
* 5XX See Also Reference	* X11 Conference Name
* 6XX Notes	* X30 Uniform Title
	* X51 Geographic Name

Methods of Machine-Readable Authority Control

* Batch Authority Control on Tape:
Bibliographic records on tape are compared to headings of appropriate authority records through automated match process. If the heading in the cataloging record matches an established heading in the LC authority record, a direct linkage is created. If the heading matches a "see" reference in the authority record, the heading is revised ("flipped") to the established heading.

* CD-ROM Authority Control:
Purchase LCSH & Name Authority records on CD-ROM to check before cataloging material on local system.

* Manual File

Outline

Issues in Bibliographic Conversion

Authority Control

Controlled Vocabulary Lists

Advantages of Authority Control

Better access

More search certainty

Uniform Display

Issues in Bibliographic Conversion

Controlled Vocabulary Lists for Authority Control

* Library of Congress Subject Headings
(LC Name & Subject Authority records are available in machine-readable form)
*Sears Subject Headings
(scheduled availability for machine-readable records is Fall 1988)
* National Library of Medicine Subject Headings(MESH)
* Government Printing Office

Advantages of Authority Control

* Better access to materials
* More search certainty
* Uniform display format

TAPE PROCESSING: GENERAL THOUGHTS

√ **PLAN EARLY**

√ **UTILIZE VENDOR'S EXPERIENCE**

√ **CONTRACT WITH VENDOR FOR PROCESSING SERVICES, WHENEVER POSSIBLE**

TAPE PROCESSING OPTIONS AND ITEM RECORDS CREATION:

Some general thoughts regarding tape processing.

1. Plan early for tape processing. Many vendors have extensive processing backlogs, and these can cause your project considerable delay. If you must use a bibliographic utility for extraction of your tapes, it would be wise to contact them as soon as you are aware that these services are needed.

2. Whenever possible, there are considerable advantages in having your library system vendor help you prepare your tape processing options. Most turnkey vendors have considerable experience with this task, and will therefore prove useful in providing the necessary specifications without your having to create them from the beginning.

3. It is also very useful to contract with the vendor for many of these services, especially the production of intelligent labels. Although it is more expensive to do so, making the vendor completely responsible for this part of the project reduces the library's liability exposure from schedule slippage or for an improperly-processed database.

TAPE PROCESSING OPTIONS

√ **RECORD EXTRACTION**

√ **MARC 019 RESOLUTION**

√ **BIBLIOGRAPHIC RECORD DEDUPLICATION**

TAPE PROCESSING OPTIONS:

1. Record Extraction

This procedure normally applies when the library has elected to catalog via a bibliographic utility and has not subscribed to archival tape copies of its cataloging records. It could, however, become necessary for those libraries which have such subscriptions, if the tapes have not been adequately stored and periodically refreshed approximately every three years. A library may have to have such in-house archival tapes carefully tested to assure readability.

A bibliographic utility stores its tapes as a chronological series of all cataloging transactions performed by all the users of that utility. It is therefore necessary for that utility to search the entire data base from the beginning of a particular library's use of the utility in order to be able to find all of that library's records. In order to find these records, the bibliographic utility has a standard location in each bibliographic record into which a library indicates its use of that record. In OCLC's data base for example, that place is the MARC 049 field.

Typically, therefore, the extraction program looks sequentially into each 049 field of the bibliographic records on the archival transaction tapes to locate the library's holding symbol. With OCLC this symbol is a 4-character code, the first three indicating the library, with the fourth as a branch or subcollection. This search normally inspects the first three characters of the first holding code in the 049 field, and extracts the record if there is a proper match.

Some libraries, however, would like to extract only a subset in order to perform a conversion, for example, in the case where a campus law library is the only applicable entity for the conversion. This is usually more expensive, as the program requires that all 049 fields be searched.

Depending upon the library's current and past cataloging practices for entering the data, which was usually done for catalog card production, the extraction program could become quite complex.

2. MARC 019 Field Resolution

The MARC 001 field is designated as the sequential bibliographic record number identifier for that particular data base. The so-called "OCLC Number" is therefore located in this MARC field in the records in the OCLC data base. This is a very important number for the identification of an individual bibliographic record, and is often used as the major determinant for bibliographic record matching. Nevertheless, OCLC has occasionally elected to perform several kinds of bibliographic record modifications to its data base.

One such change is to correct the bibliographic data in a particular record; a good example would be the author information. When this occurs, the holdings symbols are not affected, and your library's 1984 archive tape of the usage of that bibliographic record would match the current on-line OCLC 001 MARC field for that record.

Another such change is to combine several bibliographic records which are essentially duplicates, except that they have different MARC 001 fields. The result is that there is a new record with a new 001 field; therefore, if a library previously used one of the older bibliographic records, the library's archive tape would not match the current on-line database or a library's use of the newer record. In such cases, the new record contains a MARC 019 field which holds all of the OCLC numbers (MARC 001 fields) from all of the previously combined duplicate records.

The 019 resolution, therefore, examines all of the library's archive tapes, and locates and corrects those records which used older MARC records which have since been combined into newer records. This is especially important in bibliographic record deduplication.

3. Bibliographic Record Deduplication (also known as "deduping")

This process identifies the multiple occurrences of a bibliographic record in the library's archive tapes and combining them into a single occurrence. The principle identifier is the data base control number, i. e., the MARC 001 field. Usually all occurrences of the bibliographic record are combined into the last occurrence on the library's archive tape, as the most recent cataloging information is usually the most correct and corresponds with the library's present cataloging practices.

The usual goal of this process is to provide the library with a tape file containing only one occurrence of every bibliographic record, and to retain in that record all currently valid holdings data. If the library has had considerable shifts of cataloging procedures over the years, then it may be necessary for different deduplcation processing may be necessary for different sections of the file.

There are five major areas about which the library might concern itself during deduplication:

1. **The control number (MARC 001 field)**

2. **The date and time of the transaction MARC 005 field)**

3. **Transaction type (e. g., addition, deletion)**

4. **Holdings code information in the OCLC MARC 049 field, and any associated call numbers in the MARC 050 through MARC 090 fields, and local information fields like MARC 949.**

5. **Bibliographic data**

ITEM RECORD CREATION CONCERNS

√ "INTELLIGENT" VS "DUMB" LABELS

√ LABEL SORTING ORDER

√ LABEL PRODUCTION ALGORITHMS

√ BIBLIOGRAPHIC INFORMATION DISPLAY ON LABEL FACE

√ DUPLICATE COPY LABELING

ITEM RECORD CREATION CONCERNS

1. **"Intelligent" or "Dumb" Labels. Intelligent labels are item labels produced in shelf list order and already included on the bibliographic record tape when it is loaded into the system. The staff must affix these intelligent labels directly to the specific items for which they were produced. Dumb labels are not associated with any particular library items and the staff must electronically link the label information to bibliographic information in the computer data base. These processes will be discussed in greater detail later in the session.**

   If your library elects to have intelligent labels, however, you must decide several issues:

2. **The labels must sort properly into shelf list order.If they do not do so, the labeling process becomes considerably more chaotic. This implies that the library must carefully consider its current and <u>previous</u> cataloging processes for issues like these:**

   Into which MARC fields did the library catalog insert its call numbers?

   Did the library consistently use the same cataloging methods to represent certain bibliographic groups? If there are great variances, it may be necessary for a separate computer program to standardize them. If you fail to do so, the system will sort the labels into different groups. Primary suspects for this include fiction (Fict., F, Fic, fic, etc.), juvenile books (J, Y, E, * etc.), biographies, and old cataloging that may lack Cutter numbering.

   How did the library represent the branch holdings in the 049 or 949 fields of the MARC records.

3. **Through which algorithm does the library intend to produce the intelligent labels? Some libraries have sufficiently consistent cataloging and withdrawal**

procedures so that they can use the 049 and 949 fields to produce accurate copy data for all branches. Others decide to produce one copy of all titles for all branches. Others decide to use a large branch as representative of the remaining branches in order to create intelligent label sets.

4. How does the library want to represent the bibliographic data on the intelligent labels? Typically the information comes first from the branch, sub-sorted by collection, then by call number, and then by main entry, and then from the title and imprint information. Nevertheless, there are limits on the number of characters which can be printed onto an intelligent label, and the manner of display should be carefully considered.

5. How does the library plan to label and link the duplicate copies of its titles? Unless a retrospective conversion from the shelf list was performed in connection with an automation project, many libraries have not included copy information in a bibliographic utility data base.

GENERAL ITEM LABELING PRINCIPLES--PLANNING

√ **PLANNING COMMITTEE--TOTAL STAFF INVOLVEMENT**

√ **CONCURRENT TASKS**

√ **LIBRARY CLOSURE?**

√ **PROJECT GOALS**

√ **PUBLIC RELATIONS CAMPAIGN**

√ **TRAINING PLAN**

√ **LABELING PROCEDURES TESTING**

GENERAL ITEM LABELING PRINCIPLES

LABELING PLANNING CONCERNS

This is a complex logistical exercise. The ultimate goal of the item labeling project is to affix a machine-readable label to every applicable piece in the library, and to input this item label information into the computer so that it is electronically linked with the corresponding title (bibliographic) record in the computer data base. This normally implies that every book, film, phonograph record, video and audiocassette, etc. that the library would like to list separately in the computer must be physically handled, labeled, and reshelved. This requires considerable human and material resources, and proper planning will help to obtain the maximum output from these assets. The following suggestions will prove helpful in accomplishing this goal:

1. **Form a planning committee comprised of representatives from all service areas of your library. You will need the input from the reference, circulation, and technical services staffs not only for the valuable information that they can furnish, but also in their involvement.**

   One major consideration is the location of the labels themselves. Some libraries prefer placing the labels inside the back cover near the traditional due date stamp. Others prefer the title page. Others prefer the outside cover, either on the spine or the back. Each has its advantages.

2. **Consider other tasks that you can perform concurrently with the labeling project. Since you must handle all of the library materials individually, this may be a good time to affix security system sensor pieces, select materials for mending, correct spine labels, conduct an inventory, and the like.**

LABELING PLANNING CONCERNS, continued

3. Decide whether you will close the library during the labeling project. Closing provides the following advantages:

   Your staff are not interrupted with the daily library business.

   All staff can dress casually, with appropriate amenities like radios, refreshments, etc.

   The shelves are more easily kept in order, and the progress of the labeling more accurately tracked.

   All of the staff can be available for the project. They can therefore affix a greater number of labels during a shorter amount of time.

   The <u>disadvantages</u> include:

   The patrons do not have access to the collection. Despite the best publicity campaign, there will be those who do not learn of the closing.

   Because you have assembled large amounts of manpower, any serious planning errors waste larger quantities of this expensive resource.

   For the same reasons, larger quantities of logistical supplies are necessary, e. g., book trucks, step stools, procedures manuals

4. Establish your project goals based on the available resources.

   For example, are there time limits for finishing the labeling project? The library may be closed for a limited length of time or you may be obligated contractually to a system implementation schedule.

LABELING PLANNING CONCERNS, continued

How many people do you have to do this project? Can you obtain the help of volunteers, students, service groups, etc.? In using your permanent staff for this project, how will you continue the day-to-day business and maintain morale throughout this effort?

After considering all of the available resources and your time constraints, can you perform the concurrent tasks suggested above?

5. **Create a suitable public relations campaign for your staff and your patrons to communicate the benefits of the project. This is especially important if you plan to close the library for a considerable amount of time. Some elements could include:**

   fliers, posters, and other advertising explaining the improved service resulting from this effort

   similar advertising acknowledging the efforts of volunteers and other service groups

   T-shirts to be used by the staff during the project. There could be a contest for the design of these shirts.

   a "thermometer" wall display tracking the progress of the project

   contests and prizes for labeling team speed and accuracy

6. **Assemble a suitable training plan for the labeling procedure. This could include not only a procedures manual, but also an audiovisual/slide show which would demonstrate the proper labeling methodology.**

7. **Build a test run into your planning schedule to assure that your procedures are adequate and appropriate.**

PROCESS I (DUMB LABELS)

√ **OPTION A: LABELING AND DATA ENTRY AT SHELVES**

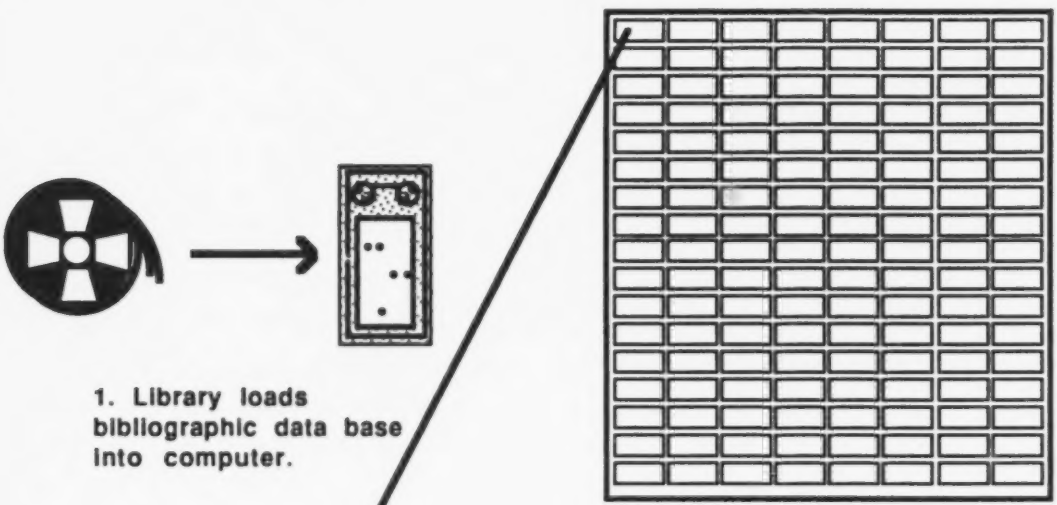
√ **OPTION B: LABELING AND DATA ENTRY AT CENTRAL WORK STATION**

√ **OPTION C: LABELING MATERIALS AND SHELF LIST, DATA ENTRY AT CENTRAL WORK STATION**

√ **OPTION D: ON-THE-FLY CONVERSION, WITH LABEL APPLICATION**

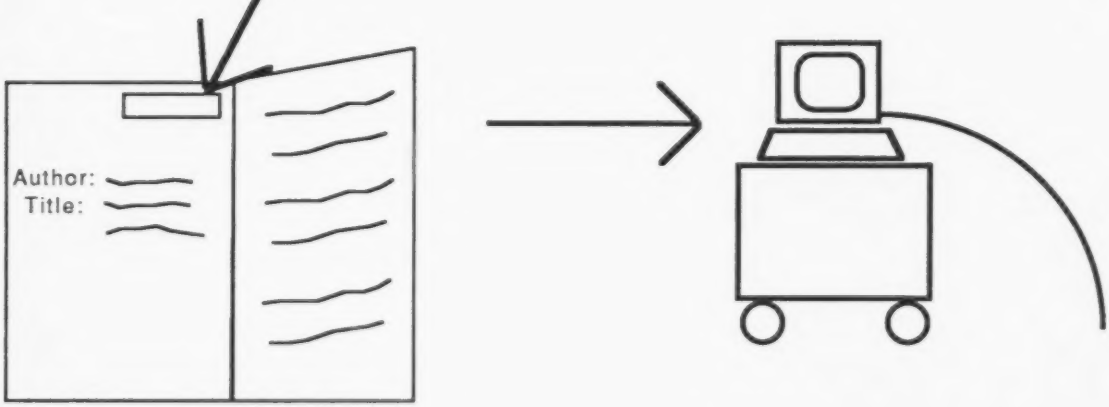
√ **OPTION E: ON-THE-FLY CONVERSION, WITH LABELS ALREADY APPLIED**

Process I (Dumb Bar Codes), Option A: Labeling and Data Entry at Shelves



1. Library loads bibliographic data base into computer.

2. Staff affixes dumb labels to the collection.



3. Staff Affixes Bar Code into Proper Location

4. Staff enters data into custom designed moving work stations.

Process I (Dumb Labels)

Option A, Labeling and Data Entry at Shelves

Advantages:

1. **There are some savings in label costs.**

2. **There is greater control surrounding the start and finish of labeling particular sections of the library, and in handling the duplicate copies of titles.**

3. **The library avoids the extra work surrounding the creation of detailed functional and sorting specifications for intelligent label production.**

4. **The library avoids the physical labor of transferring the books to carts, moving them do a data entry area, moving them back to the shelves and reshelving.**

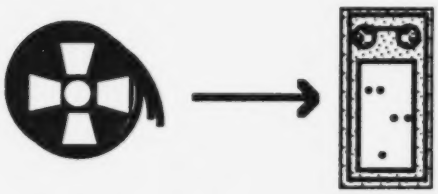
Disadvantages:

1. **The work stations are difficult to design. Cabling and other connection devices run all over the library.**

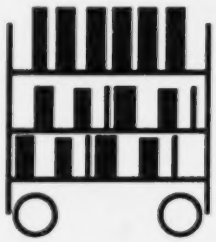
2. **The library must link every item in the collection to the bibliographic data base. This is accomplished at a rate of approximately 40 items per hour, after they are labeled.**

3. **The overall library data entry rate is limited to the number of available data entry terminals and operators.**

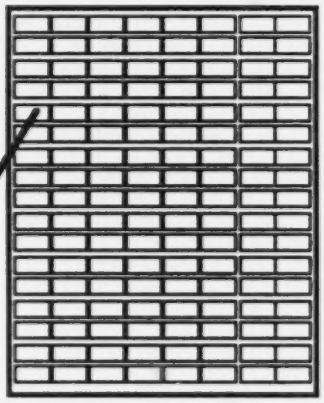
Process I (Dumb Bar Codes), Option B: Labeling and Data Entry at Central Work Station



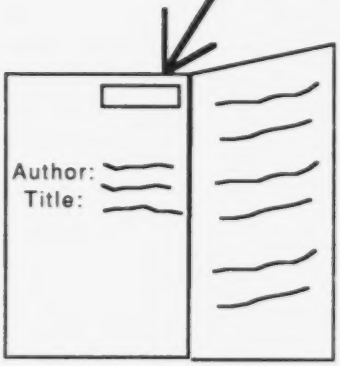
1. Library loads bibliographic data base into computer.



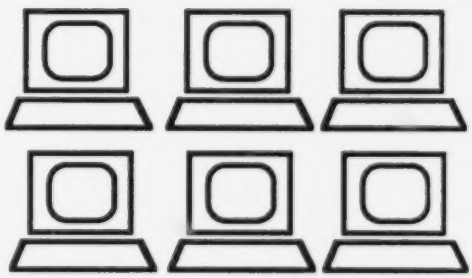
2. Staff roll all materials to data entry area.



3. Staff affixes labels to library materials.



4. Staff Affixes Bar Code into Proper Location



5. Staff enters data at special data entry station pool.

Process I (Dumb Labels)

Option B, Labeling and Data Entry at Central Work Station

Advantages:

1. There are some savings in label costs.

2. There is greater control surrounding the start and finish of labeling particular sections of the library, and in handling the duplicate copies of titles.

3. The library avoids the extra work surrounding the creation of detailed functional and sorting specifications for intelligent label production.

4. There is greater administrative control with all of the data entry operators centrally located, and it is easier to design this type of work location.

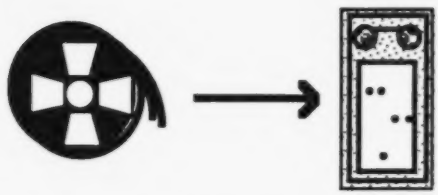
Disadvantages:

1. The library must link every item in the collection to the bibliographic data base. This is accomplished at a rate of approximately 40 items per hour, after they are labeled.

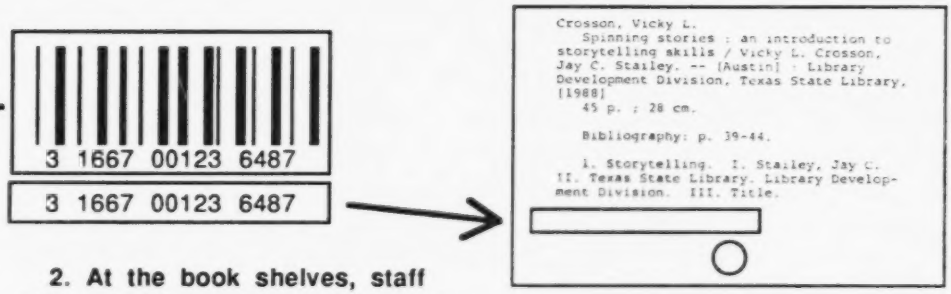
2. The overall library data entry rate is limited to the number of available data entry terminals and operators.

3. The library incurs the physical labor of transferring the books to carts, moving them do a data entry area, moving them back to the shelves and reshelving.

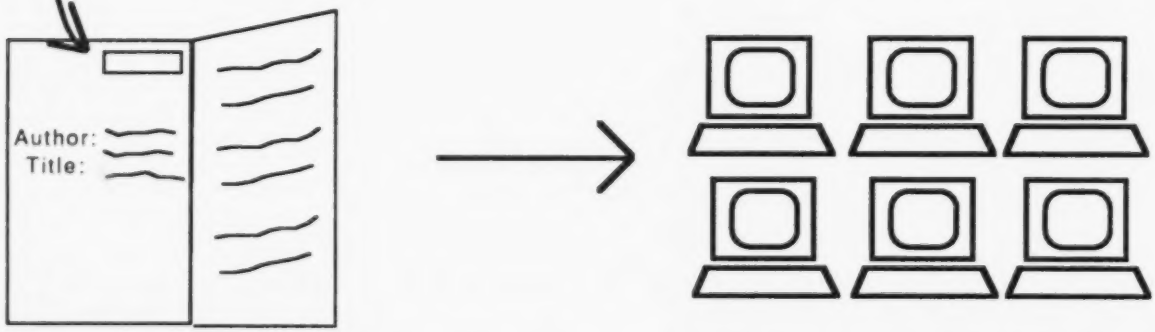
Process I (Dumb Bar Codes), Option C: Labeling Materials and Shelf List, with Data Entry at Central Work Station



1. Library loads bibliographic data base into computer.


3 1667 00123 6487
3 1667 00123 6487
Crosson, Vicky L.
Spinning stories : an introduction to storytelling skills / Vicky L. Crosson, Jay C. Stailey. -- [Austin] : Library Development Division, Texas State Library, [1988]
45 p. ; 28 cm.
Bibliography: p. 39-44.
1. Storytelling. I. Stailey, Jay C. II. Texas State Library. Library Development Division. III. Title.

2. At the book shelves, staff affix machine readable labels to library materials, duplicate human readable label to corresponding shelf list cards.



3. Staff affixes bar code into proper location,book returned directly to shelf.

4. Staff enters data at special data entry station pool.

Process I (Dumb Labels)

Option C, Labeling Materials and the Shelf List, with Data Entry at Central Work Station

Advantages:

1. **There are some savings in label costs.**

2. **There is greater control surrounding the start and finish of labeling particular sections of the library, and in handling the duplicate copies of titles.**

3. **The library avoids the extra work surrounding the creation of detailed functional and sorting specifications for intelligent label production.**

4. **The library avoids the physical labor of transferring the books to carts, moving them do a data entry area, moving them back to the shelves and reshelving.**

5. **There is greater administrative control with all of the data entry operators centrally located, and it is easier to design this type of work location.**

Process I (Dumb Labels)

Option C, Labeling Materials and the Shelf List, with Data Entry at Central Work Station, continued

Disadvantages:

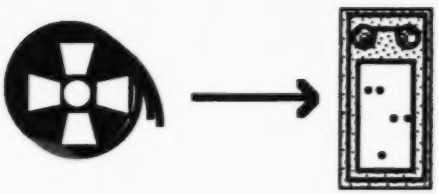
1. **The library must link every item in the collection to the bibliographic data base. This is accomplished at a rate of approximately 40 items per hour, after they are labeled.**

2. **The overall library data entry rate is limited to the number of available data entry terminals and operators.**

3. **Data entry is done from shelf list cards, and not from the actual material, a less reliable method.**

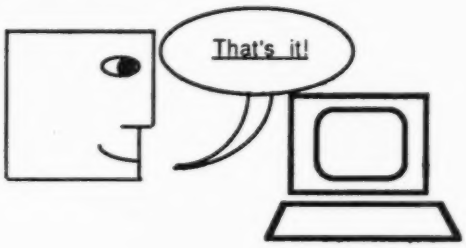
4. **This conversion method assumes an extremely accurate shelf list.**

Process I (Dumb Bar Codes), Option D: On-the Fly Conversion, with Label Application

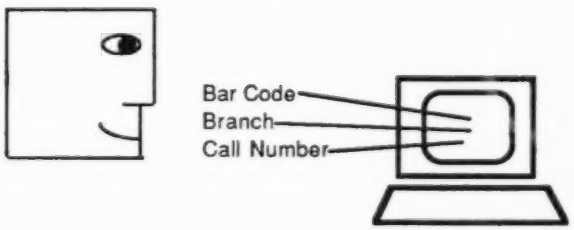


1. Library loads bibliographic data base into computer.

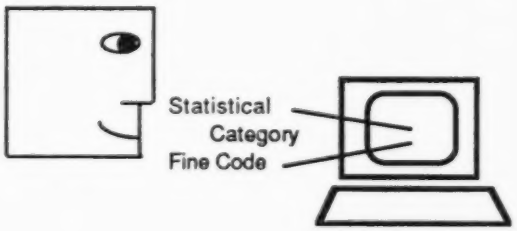
2. During checkout staff affixes bar code into proper location.



3. Staff searches data base for title match.



4. Staff member creates brief item record, then checks out book to patron.



5. Upon item's return, staff enters remaining data before reshelving.

Process I (Dumb Labels)

Option D, On-the-fly conversion, with label application

Advantages:

1. **There are some savings in label costs.**

2. **The library avoids the extra work surrounding the creation of detailed functional and sorting specifications for intelligent label production.**

3. **The library avoids the physical labor of transferring the books to carts, moving them do a data entry area, moving them back to the shelves and reshelving.**

4. **This method permits on-line circulation to begin at an earlier time, and converts the materials which are in heaviest use.**

Disadvantages:

1. **The conversion is performed in a random order, as the materials are circulated. It will later be necessary to make a pass through all library shelves to convert the remaining materials.**

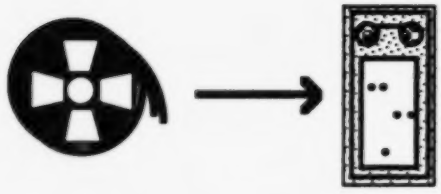
2. **The linking occurs at a circulation desk during public service operations. This can result in less accurate data entry.**

3. **Data entry at the circulation desk often causes lines to form at checkout, and poor public relations can result.**

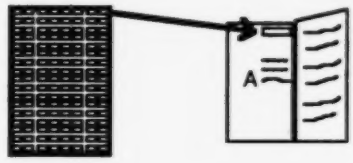
4. **Upon return, the partially converted materials must be segregated from the fully converted materials. This complicates sorting and other checkin procedures.**

5. **The database is incomplete until the entire collection has been converted.**

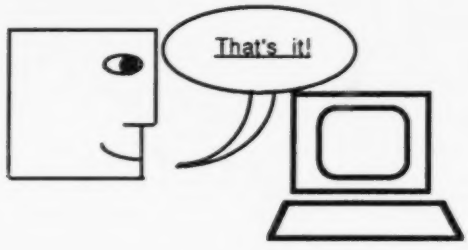
Process I (Dumb Bar Codes), Option E: On-the Fly Conversion, with Collection Already Labeled



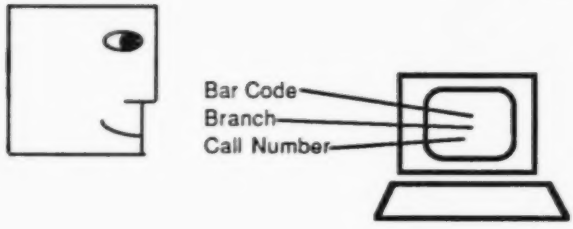
1. Library loads bibliographic data base into computer.



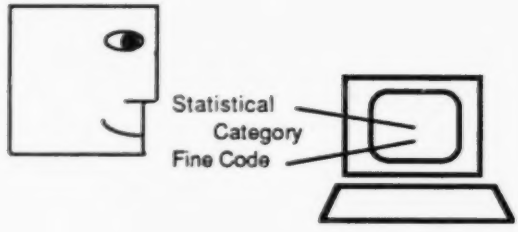
2. Entire library collection is labeled prior to circulating on line.



3. Staff searches data base for title match.



4. Staff member creates brief item record, then checks out book to patron.



5. Upon item's return, staff enters remaining data before reshelving.

Process I (Dumb Labels)

Option E, On-the-fly conversion, with collection already labeled

Advantages:

1. **There are some savings in label costs.**

2. **The library avoids the extra work surrounding the creation of detailed functional and sorting specifications for intelligent label production.**

3. **The library avoids the physical labor of transferring the books to carts, moving them do a data entry area, moving them back to the shelves and reshelving.**

4. **This method permits on-line circulation to begin at an earlier time, and converts the materials which are in heaviest use.**

5. **The labor of labeling the entire collection is completed.**

Disadvantages:

1. **The conversion is performed in a random order, as the materials are circulated. It will later be necessary to make a pass through all library shelves to convert the remaining materials. This is especially difficult to determine if the item is already labeled.**

2. **The linking occurs at a circulation desk during public service operations. This can result in less accurate data entry.**

3. **Data entry at the circulation desk often causes lines to form at checkout, and poor public relations can result.**

Process I (Dumb Labels)

Option E, On-the-fly conversion, with collection already labeled, continued

4. **Upon return, the partially converted materials must be segregated from the fully converted materials. This complicates sorting and other checkin procedures.**

5. **The database is incomplete until the entire collection has been converted.**

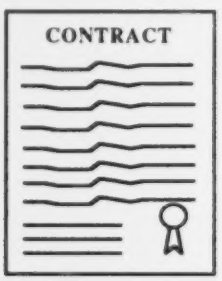
PROCESS II (INTELLIGENT LABELS)

√ OPTION A: LABEL CREATION BY VENDOR SERVICE BUREAU

√ OPTION B: LABEL CREATION BY LOCAL LIBRARY AUTOMATED SYSTEM

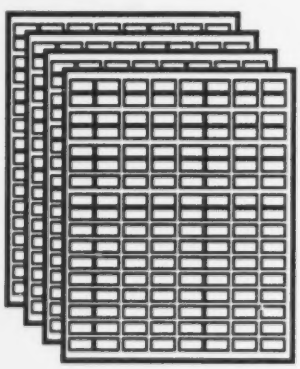
Process II (Smart Bar Codes), Option A: Item Labels Created by Vendor

1. Library provides tape of its bibliographic records to automation system or data conversion vendor.

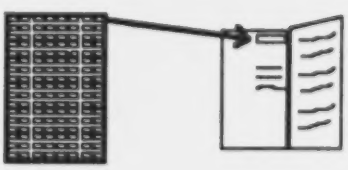


2. Library contracts with the vendor to create custom software program to insert copy information (e. g., label number, branch, statistical category, etc.) into its data base.

3. Library loads modified bibliographic data base into computer.



4. Library receives sheets of labels, arranged by branch, sub-sorted into shelf list order.



5. Library collection is labeled prior to circulating on line.

Process II (Intelligent Labels)

Option A, Creation of Intelligent Labels by Vendor Service Bureau

Advantages:

1. **The vendor usually has extensive experience in this process, and therefore is better able to create the detailed functional and sorting specifications for intelligent label production.**

2. **The vendor is responsible if any problems arise.**

3. **There is greater control surrounding the start and finish of labeling particular sections of the library, and in handling the duplicate copies of titles.**

4. **The library avoids the physical labor of transferring the books to carts, moving them do a data entry area, moving them back to the shelves and reshelving.**

5. **Most importantly, much of the time involved with the linking of items to titles is avoided.**

Process II (Intelligent Labels)

Option A, Creation of Intelligent Labels by Vendor Service Bureau, continued

Disadvantages:

1. **The library still must link every item in the collection for which there was no label produced. This would include the duplicates, materials for which no MARC cataloging was created (e. g., paperbacks, ephemeral materials) This is accomplished at a rate of approximately 40 items per hour, after these materials are labeled.**

2. **The overall library data entry rate is limited to the number of available data entry terminals and operators.**

3. **Extensive procedures must be created to capture and label those items which were not on the shelves during the labeling process. Also, the staff would have to delete those items from the data base for which the corresponding materials were never found.**

Process II (Intelligent Labels)

Option B, Creation of Intelligent Labels by Local Library Automated System

Advantages:

1. There is greater control surrounding the start and finish of labeling particular sections of the library, and in handling the duplicate copies of titles.

2. There are some savings in label costs if the library prints its own using blank label stock.

3. The library avoids the physical labor of transferring the books to carts, moving them to a data entry area, moving them back to the shelves and reshelving.

4. Most importantly, much of the time involved with the linking of items to titles is avoided.

Disadvantages:

1. The vendor usually has extensive experience in this process, and therefore is better able to create the detailed functional and sorting specifications for intelligent label production. Should the library elect to use the vendor's software to do so, the library is more responsible for improper sorting of the labels.

2. The library is responsible if any problems arise. These could include delays, poor label readability if the library prints its own labels, and other production problems.

Option B, Creation of Intelligent Labels by Local Library Automated System, continued

3. The library still must link every item in the collection for which there was no label produced. This would include the duplicates, materials for which no MARC cataloging was created (e. g., paperbacks, ephemeral materials) This is accomplished at a rate of approximately 40 items per hour, after these materials are labeled.

4. The overall library data entry rate is limited to the number of available data entry terminals and operators.

5. Extensive procedures must be created to capture and label those items which were not on the shelves during the labeling process. Also, the staff would have to delete those items from the data base for which the corresponding materials were never found.

GENERAL PATRON REGISTRATION PRINCIPLES:

√ **PROCEDURES MANUAL**

√ **REGISTRATION FORM FORMAT**

√ **WHAT INFORMATION TO COLLECT (FOLLOWS)**

WHAT INFORMATION TO COLLECT

- √ NAME
- √ ADDRESS
- √ RESPONSIBLE PARTY
- √ BORROWER TYPE
- √ EXPIRATION PERIOD
- √ DELINQUENCY STATUS
- √ SYSTEM LABEL NUMBER
- √ OTHER INFORMATION

GENERAL PATRON REGISTRATION PRINCIPLES:

PROCEDURES MANUAL

The library will have to write its own procedures manual which incorporates the library's rules with the vendor's particular system.

The vendor manuals usually provide too much information, as they incorporate all of the available options. Some of these will be inappropriate for your operations.

FORMAT OF REGISTRATION FORM

The library has three obligations in preparing a registration form:

1. **The form is relatively easy to complete and does not offend the patron.**

2. **The information that is collected is relevant and useful to library operations.**

3. **The form is designed to follow the general data entry order that your system provides.**

WHAT INFORMATION TO COLLECT

1. NAME

1. You will need to establish a procedure for entering the proper forms of the name. You may require that nicknames and first initials be expanded into full names. If you do not, when Bill Jones re-registers under William Jones, you will not discover his previous record.

2. Some systems have an alternate patron identifier field, which can be constructed from an arbitrary algorithm. If you use this type of system, you may need additional procedures in order to establish consistency in the construction of this identifier.

   Example 1: Jones, John H.
   Birthday: May 22

   Alternate ID= JONEJ522

   Example 2: MacMillan, William

   Birthday: November 26

   Alternate ID= MMILWN26

WHAT INFORMATION TO COLLECT

2. ADDRESS

Many systems permit either more than one address line, or more than one type of address (residence, mailing).

You will need to incorporate your data entry procedures with the functionality of the system. This could include your own residency and patron notification requirements.

3. RESPONSIBLE PARTY

This is usually the parent or guardian. Although many systems typically have a field for of this type of data entry, you will probably find that there is no electronic link between the child's library card and the adult.

Therefore, once a child becomes delinquent, the usual solution is to check the database for the responsible party, and create some manual delinquent link to that party. This involves considerable data entry overhead, and can be awkward to clear once the child's delinquency is resolved.

Often patron privacy can be compromised in the process.

WHAT INFORMATION TO COLLECT

4. BORROWER TYPE (TWO DISTINCTIVE AREAS)

A. Borrower Privileges

Many systems actually have as few as approximately 10 such types for borrowing privileges. Others permit thousands. If too many such classes are established, then a procedure change could involve considerable parameter changes.

Usually these rights fall into the areas of loan periods for each media type (e. g., patron borrower Class "A" can borrow books for 21 days, and films for 5 days; Class "B" can borrow books for 14 days and films for 3 days. Depending upon the vendor, these types can have different rights for each branch.

B. Statistical Counts

In some systems these have nothing to do with borrowing privileges; rather they serve only for data collection concerning borrower patterns and usage.

In some cases the permitted number of such categories seems deceptively large. One vendor claims 2,000 such categories; however, this is based on the combined matrix product of these categories.

(SEE NEXT PAGE FOR EXAMPLE OF MATRIX PRODUCT)

Example of patron matrix product:

Male/Female	**(2 Categories) X**
Race (EEOC defines 5, plus "no response")	**(6 Categories) X**
Age Group (9, plus "no response")	**(10 Categories) X**
Location Code (9, plus, "no response)	**(10 Categories)**
	= 1,200 Categories

WHAT INFORMATION TO COLLECT

5. EXPIRATION PERIOD

You would like to establish a suitable length for the expiration period.

Depending upon the system, it may not be possible to check out a book to a patron with an expired library card, unless the operator exits the checkout function and enters the data entry function. This can be awkward at the circulation desk.

Some libraries use a defined time limit from the date of registration.

This may seem fine to continue this way; however, if you are already re-registering the patrons for the automated system, all of the cards will expire at about the same time. This could cause congestion at the circulation desk.

A possible alternative might be to use the birthday as the expiration date. This procedure implies that different patrons will have different validity periods for their cards; however, it avoids the congestion problem, and may make the expiration date easier for the patrons to remember.

WHAT INFORMATION TO COLLECT

6. DELINQUENCY STATUS (TWO TYPES)

A. Automatically Set By System

This is normally discussed with vendor before implementation. Depending upon the system, you may be able to have the system automatically set the patron delinquent by various thresholds (the number of overdue books; the dollar amount of overdue fines; the dollar value of overdue books; the number of materials borrowed in a particular media code; the dollar amount of damaged materials; etc.)

B. Manually Set By Operator

This requires careful procedural establishment. It might be possible to set a patron delinquent for a message the next time s/he returns to the library, or to block a parent for a child's delinquency With the implementation of a computer having a single data base, all staff in all branches will essentially be working in each other's files. Greater consistency is therefore required.

Some libraries key in all of their delinquent patrons from the manual system into the automated system, thereby blocking such patrons from further borrowing. There are a couple of concerns associated with this strategy:

There is considerable data entry overhead, not only upon initial keying of the data, but also in keeping it current until the library begins circulation via the automated system.

Often the delinquency status is already quite old, and/or these patrons have moved away.

WHAT INFORMATION TO COLLECT

7. SYSTEM BARCODE/LABEL NUMBER

This is the unique, scannable number by which the system knows the patron. Data entry techniques will be discussed later.

Some libraries would like to use a second ID number available from other established databases, like the driver's license number, student ID number, or Social Security Number. There are a couple of problems associated with this procedure:

Sometimes such ID numbers are not easily compatible with the chosen automated library system. Special software might be required, and this would put the library out of the mainstream for enhancements developed for that system.

The patrons can be adamantly opposed to providing their Social Security Numbers, especially in public libraries.

Although there may be some perceived advantage gained by using the driver's license number in order to be able to access the DMV database, libraries often do a better job of keeping their files current than the DMV.

Since many of these databases are already available in machine readable form, many libraries would like to try to obtain and use them to reduce the keystroking to the system. Sometimes this approach creates more difficulties than it solves because the data is either incomplete, requiring additional data collection and subsequent keying. Occasionally the format of the other database is not easily usable in the library system.

WHAT INFORMATION TO COLLECT

8. OTHER INFORMATION (FOR "FREE TEXT" FIELDS)

This data entry depends completely on the system and the individual library procedures. In some systems, the replacement of text is field by field; therefore, if the operator would like to add to the text already in the free text field, it would be necessary to re-key the entire field and append the new information.

In addition to delinquency information, libraries utilize this field for other purposes:

security problems, other unacceptable patron behavior

"claimed-returned" or "claimed-never-charged" transactions

returned mail

GENERAL PATRON REGISTRATION PRINCIPLES

√ DISPOSTION OF REGISTRATION FORMS

√ KEEP/DISCARD?

√ FILING COSTS

√ FILING METHODS

√ ALTERNATIVES TO PAPER FORMS

DISPOSITION OF THE REGISTRATION FORMS

KEEP/DISCARD?

Some libraries keep the registration forms in order to retain the patron signatures and other proof of patron responsibility.

FILING COSTS

There is considerable overhead in filing these forms. It may be less expensive to excuse a few patrons with their claims of not charging materials or ignorance of their responsibilities.

FILING METHOD

If it is necessary to maintain such paper files, perhaps the easiest method is in bar code number order. This procedures eliminates the need for alphabetization and keeps the files in the general chronological order in which the cards were issued. This arrangement is useful for file purging purposes.

ALTERNATIVE TO RETAINING PAPER FORMS

As a possible alternative to paper files, if your library previously used a photographic microfilm circulation system, one could use this equipment to microfilm the registration forms for more compact storage.

√ LIBRARY CARD CONSTRUCTION

√ PAPER CARDS

√ LAMINATED PAPER CARDS

√ PLASTIC CARDS

LIBRARY CARD CONSTRUCTION

Paper Cards

The library can continue with the old paper cards; however, they remain vulnerable to damage. This risk is less of a problem during pre-automation operations. Most automated systems link all patron and circulation transaction data to the ID label on the card. With the label vulnerable on the paper library card, and with bar code label printing equipment too expensive to create duplicate replacement labels, it is advantageous to protect the bar code from damage.

Laminated Paper Cards, Label Under Lamination

Some libraries choose to continue with the paper cards, affix labels and laminate the cards. This approach can be less expensive than plastic library cards, and it utilizes the current library card stocks. Lamination helps to avoid potential card and label damage; however, many library system vendors do not guarantee successful scanning of laminated labels. Although careful testing is required, often laminated labels scan properly despite vendor warnings to the contrary.

Plastic Library Cards

Many libraries elect to purchase new and stylish plastic library cards approximately the size of credit cards. These cards are somewhat more expensive, as much as $0.20 each, depending upon the exact type and thickness of the plastic stock. Libraries can take advantage of the positive public relations associated with the new automated system and the use of these new cards. Some libraries have used the system implementation as an opportunity for a contest for a new library logo, to be included on the new plastic library cards. When given a credit card sized library card, patrons generally take both their borrowing privileges and the library card itself more seriously.

LIBRARY CARD CONSTRUCTION, CONTINUED

Plastic library cards come in various compositions, including solid plastic, mylar, and plastic-over-paper overlay. The solid constructions are far more durable. The actual thickness of the stock depends on the actual use. For example, will the cards be inserted into a typewriter? It might also be a good idea to test the adhesion qualities of the labels to a sample of the plastic stock; many labels slide after several weeks in a wallet.

The face of the card itself, especially once the automated system is implemented, contains only the library logo, some rules, a place for the label, and a signature line for the patron.

LABEL COMPOSITION

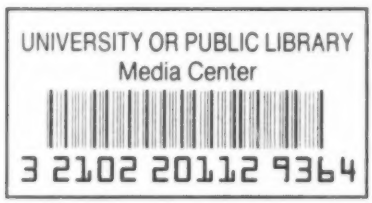
- √ FORMAT
- √ PRINTING METHOD
- √ OVERLAMINATION
- √ FACESTOCK
- √ ADHESIVE
- √ SIZE

LABEL COMPOSITION

This is normally not a major consideration during a first-time implementation, as typically the vendor provides the labels. This arrangement is generally acceptable, as the vendor thereby assumes the risk for poor label adhesion and scannability. Nevertheless there are several label characteristics that the library might discuss with the vendor.

Format:

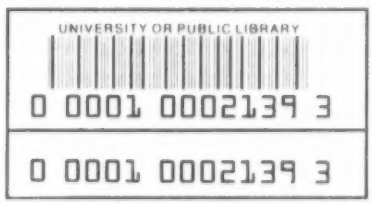
There are generally three widely used turnkey label formats: 1) Codabar, 2) Code 39, and 3) OCR-A. Although these are normally determined by the choice of turnkey system, these three label formats are often interchangeable between vendors, provided the library acquires the compatible scanning equipment. The general trend is away from OCR-A and toward bar codes. The main reasons for this are that the bar code scanners are generally less expensive, and fewer scanning errors occur with bar code technology.



SAMPLE A: DUMB Label
Codabar, 10 char. per inch

SAMPLE B:
INTELLIGENT Label
Code 39, 9.4 char. per inch

SAMPLE C: DUMB Label
Code 39, 9.4 char. per inch,
narrow scan width



SAMPLE D: DOUBLE Label
Codarbar, 10 char. per inch

The human-readable numbers in A, B, and D are in OCR-A format.

LABEL COMPOSITION, continued

Printing Methods:

There are three major methods of label printing: 1) dot matrix or other impact methods, 2) thermal, and 3) photocomposition. The third method usually results in the clearest label reproduction and easiest scanning; however, the other methods may prove equally satisfactory with suitable testing.

Overlamination:

Glossy or dull (matte) finish--test for suitable scanning
Polypropylene or polyester--the latter is more durable and expensive, and more resistant to scuffing by light pens

Facestock: (the actual composition of the label itself)

Resin coated paper--typically 4 mil thickness
Mylar--very durable and expensive

Adhesive: (an important area for permanence testing)

1 mil permanent acrylic--not as suitable for plastic jackets or library cards, textured rough outside book surfaces
2 mil permanent acrylic--more suitable for plastic jackets or library cards, textured rough outside book surfaces
2 mil high-tack permanent acrylic--typically non-removable after 2 days

Size:

Typically recommended by vendor, but must be large enough to allow for hand-held scanners ,roughly 2 inches by 5/8 inches.

PATRON REGISTRATION METHODS

PROCESS I: RE-REGISTER ALL PATRONS UPON ARRIVAL AT LIBRARY, WITH DIRECT KEYING OF PATRON INFORMATION

√ **OPTION A: USING EXISTING LIBRARY CARDS, IMMEDIATE DELIVERY**

√ **OPTION B: USING NEW LIBRARY CARDS, IMMEDIATE DELIVERY**

√ **OPTION C: USING NEW LIBRARY CARDS, SUBSEQUENT DELIVERY**

PROCESS II: TAPE LOAD OF PATRON RECORDS FROM ALTERNATIVE SOURCES

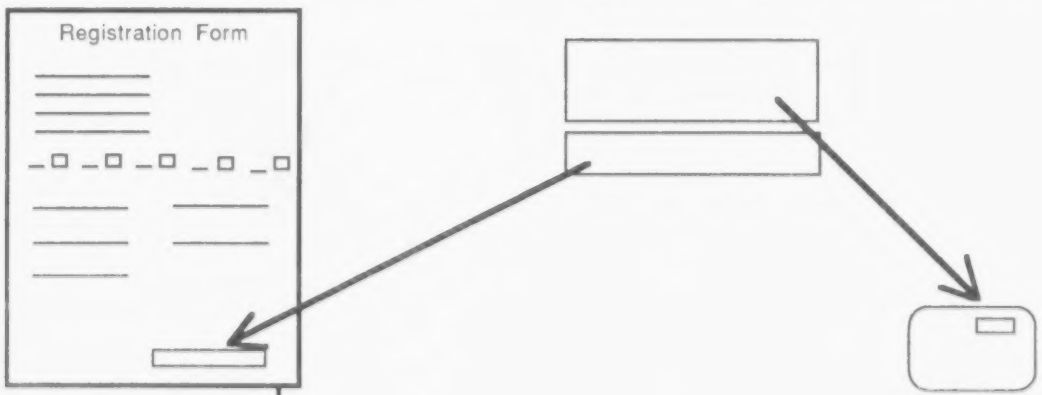
PROCESS III: CREATING PATRON DATA BASE FROM EXISTING PATRON DATA RECORDS

Process I: Re-register All Patrons Upon Arrival at Library, With Direct Keying Of Patron Information

OPTION A, USING EXISTING LIBRARY CARDS

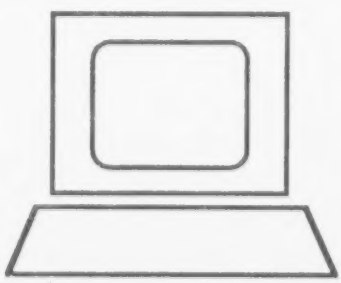
1. Patron completes new registration form, designed with help from system vendor.

2. Staff affixes double labels; barcode on patron card, human-readable label to registration form.



3. Patron retains card.

4. Clerk later enters all data at terminal.



PROCESS I: RE-REGISTER ALL PATRONS UPON ARRIVAL AT LIBRARY, WITH DIRECT KEYING OF PATRON INFORMATION

Option A, Using Existing Library Cards

ADVANTAGES:

1. Permits the use of the currently-used cards, without wasting the remaining supplies.

2. Allows the patrons to use the same library cards throughout the transition to the automated system.

3. Clearly indicates those patrons who have been re-registered; the label is already attached to the card.

4. Creates a methodology for collecting data, even before the system is installed. Spreads out the data entry task and avoids patron registration congestion at the time of system implementation.

5. Highest rate of data entry for manual methods; can be as high as 100 patrons per hour, depending upon which library automated system is chosen.

DISADVANTAGES:

1. The old cards are retained. Usually the newer ones are more modern and attractive.

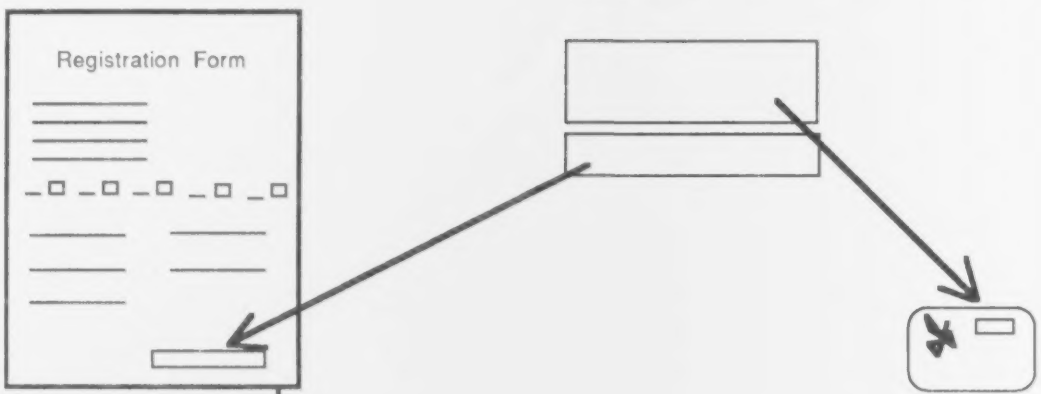
2. Several months could elapse between re-registration and actual system implementation. Patron registration information could change.

Process I: Re-register All Patrons Upon Arrival at Library, With Direct Keying Of Patron Information

OPTION B, USING NEW LIBRARY CARDS

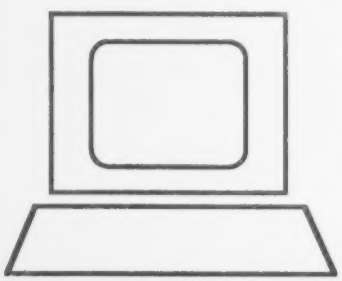
1. Patron completes new registration form, designed with help from system vendor.

2. Staff affixes double labels; barcode on patron card, human-readable label to registration form.



3. Patron retains BOTH new and old cards.

4. Clerk later enters all data at terminal.



PROCESS I: RE-REGISTER ALL PATRONS UPON ARRIVAL AT LIBRARY, WITH DIRECT KEYING OF PATRON INFORMATION

Option B, Using New Library Cards

ADVANTAGES:

1. Creates a good public relations effort for the automation project by placing the newer library cards in the hands of the public.

2. Can indicate those patrons who have been re-registered, provided they retain the newer cards.

3. Creates a methodology for collecting data, even before the system is installed. Spreads out the data entry task and avoids patron registration congestion at the time of system implementation. (SAME AS OPTION A)

4. Highest rate of data entry for manual methods; can be as high as 100 patrons per hour, depending upon which library automated system is chosen. (SAME AS OPTION A)

DISADVANTAGES:

1. Does not allow the patrons to use the same library cards throughout the transition to the automated system. The old cards are retained during the transition period. In order to be able to borrow from all branches, the patrons will have to retain both the old and new cards.

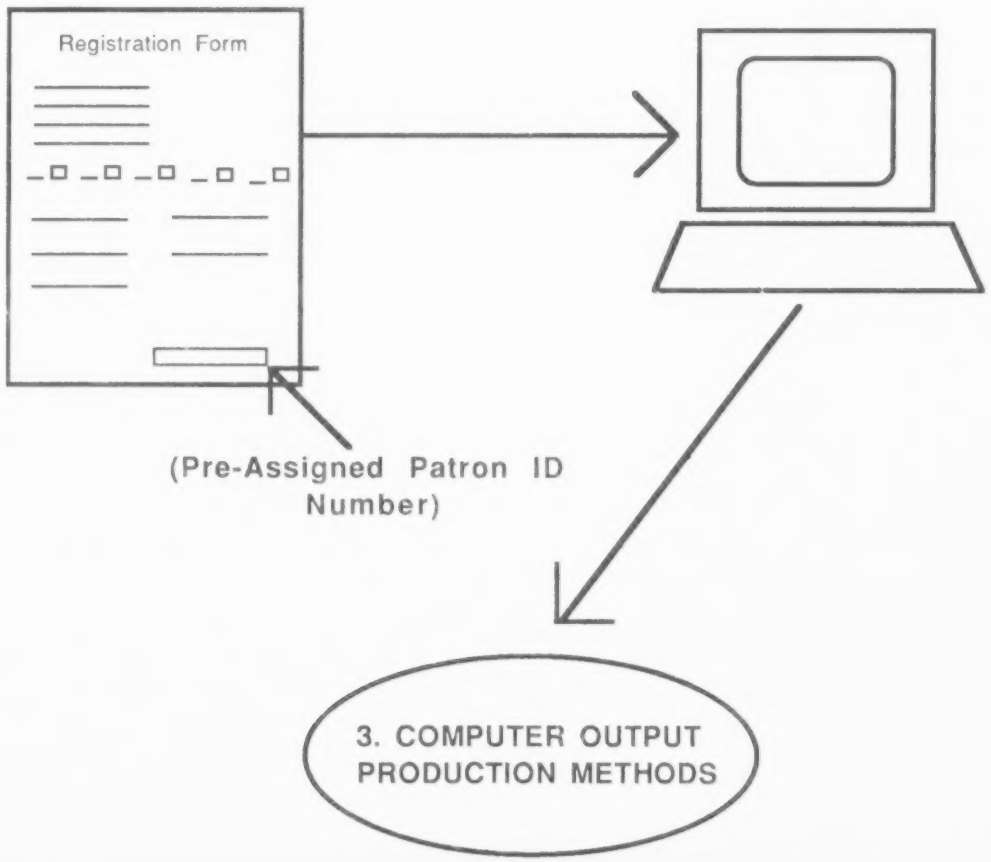
2. Several months could elapse between re-registration and actual system implementation. Patron registration information could change and the unused new card could be mislaid.

Process I: Re-register All Patrons Upon Arrival at Library, With Direct Keying Of Patron Information

OPTION C, USING NEW LIBRARY CARDS, SUBSEQUENT DELIVERY TO PATRON

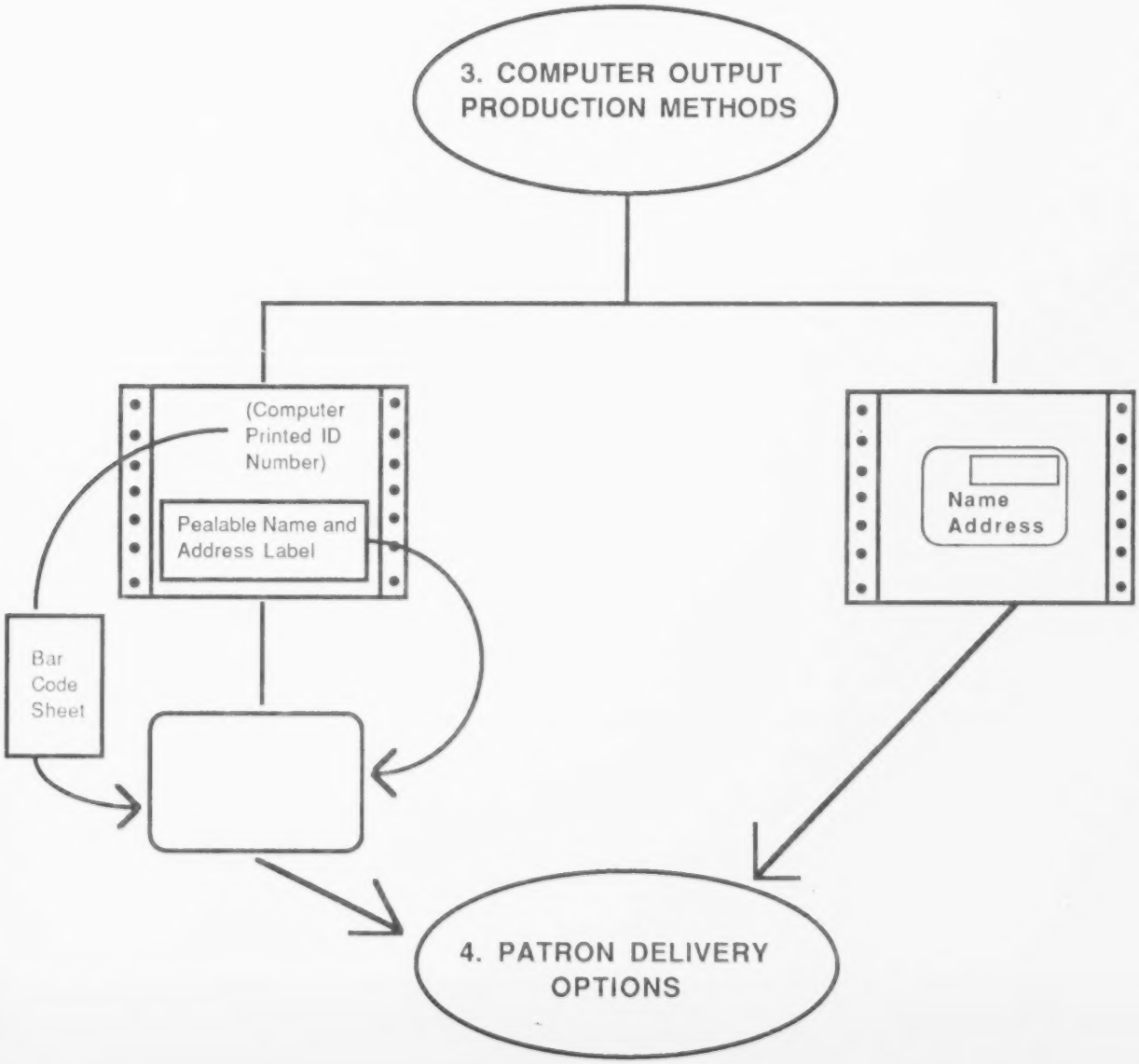
1. Patron completes new registration form, designed with help from system vendor.

2. Clerk later enters all data at terminal.



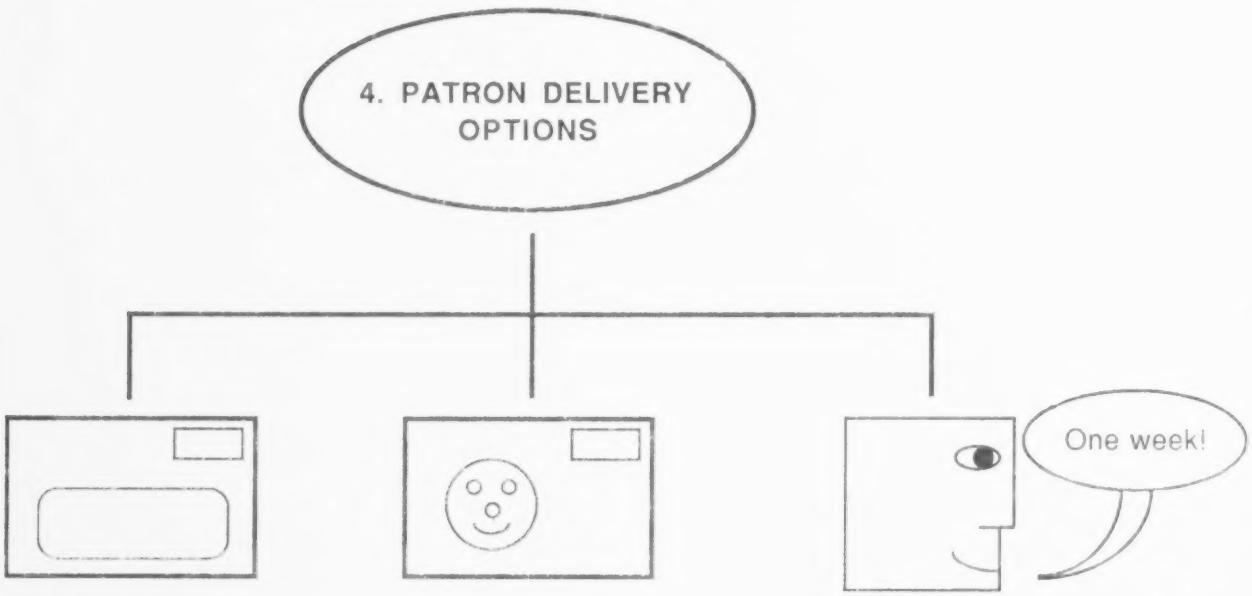
Process I: Re-register All Patrons Upon Arrival at Library, With Direct Keying Of Patron Information

OPTION C, USING NEW LIBRARY CARDS, SUBSEQUENT DELIVERY TO PATRON



Process I: Re-register All Patrons Upon Arrival at Library, With Direct Keying Of Patron Information

OPTION C, USING NEW LIBRARY CARDS, SUBSEQUENT DELIVERY TO PATRON


4. PATRON DELIVERY OPTIONS
One week!
A. Mail Library Card to Patron
B. Mail Notice to Pick Up Card
C. Staff Asks Patron to Return to Pick Up Card

PROCESS I: RE-REGISTER ALL PATRONS UPON ARRIVAL AT LIBRARY, WITH DIRECT KEYING OF PATRON INFORMATION

Option C, Using New Library Cards, Subsequent Delivery of Card to Patron

ADVANTAGES:

1. Creates a good public relations effort for the automation project by placing the newer library cards in the hands of the public. (SAME AS OPTION B)

2. Can indicate those patrons who have been re-registered, provided they retain the newer cards. (SAME AS OPTION B)

3. Creates a methodology for collecting data, even before the system is installed. Spreads out the data entry task and avoids patron registration congestion at the time of system implementation. (SAME AS OPTION B)

4. Provides address verification and other patron follow-up procedures.

PROCESS I: RE-REGISTER ALL PATRONS UPON ARRIVAL AT LIBRARY, WITH DIRECT KEYING OF PATRON INFORMATION

Option C, Using New Library Cards, Subsequent Delivery of Card to Patron, continued

DISADVANTAGES:

1. Does not allow the patrons to use the same library cards throughout the transition to the automated system. The old cards are retained during the transition period. In order to be able to borrow from all branches, the patrons will have to retain both the old and new cards. (SAME AS OPTION B)

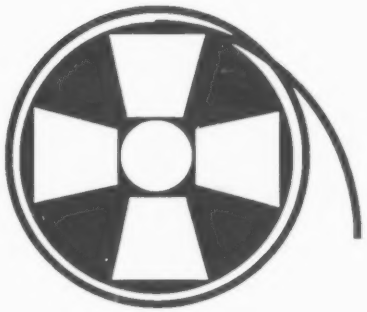
2. Several months could elapse between re-registration and actual system implementation. Patron registration information could change and the unused new card could be mislaid. (SAME AS OPTION B)

3. Clerical errors are more likely to occur during the affixing of labels.

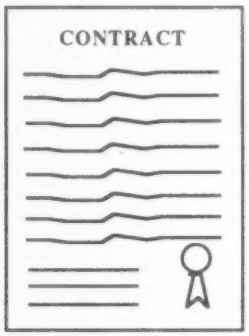
4. Poor public relations can occur because of delays or errors in library card delivery.

5. Patron data entry rate is reduced by approximately 30%.

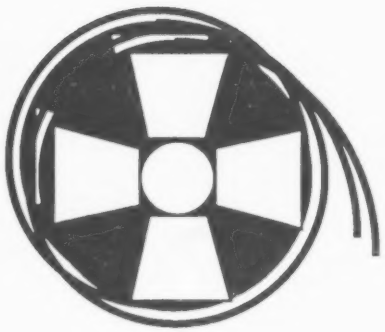
Process II: Tape Load of Patron Registration From Alternative Database Records



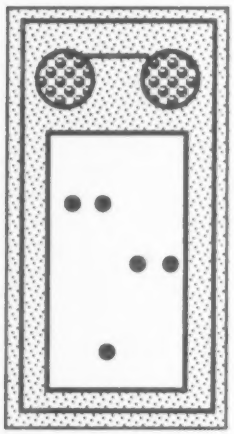
1. Tape of student records, city utility Billing, tax Rolls, or previous library system patron file



2. Library contracts with automation system or data conversion vendor to create custom software program to reformat machine readable information.



3. Vendor prepares enhanced tape set.



4. Enhanced tapes are loaded into library automated system.

PROCESS II: TAPE LOAD OF PATRON REGISTRATION FROM ALTERNATIVE DATABASE RECORDS

Option A, Contracting with Library System Vendor to Provide Conversion Services

ADVANTAGES:

1. The keystroking overhead for patron data entry is reduced.

2. The time to create the patron database is reduced, thereby permitting the library to begin circulation operations more promptly.

3. The library would be able to include its currently delinquent patrons for blocking in the new system, if it used a database from a previous system.

DISADVANTAGES:

1. Most alternative databases do not contain all of the necessary information for the library patron data records. For example, the property tax database would not contain the age and sex of the patrons, or even all of the members of that household. The school district student database may not contain the appropriate responsible party for juvenile patron responsibility. It would be therefore necessary to gather and insert the remaining data via keystroking.

2. Since there is no standard patron data record format similar to the MARC bibliographic record, it is necessary to have the vendor create custom software which would map the library's data into the appropriate fields into that vendor's proprietary patron record. This is complex, even if the library utilizes its own patron database from an earlier system, as many vendor records have fields which do not exactly correspond to each other.

PROCESS II: TAPE LOAD OF PATRON REGISTRATION FROM ALTERNATIVE DATABASE RECORDS

Option A, Contracting with Library System Vendor to Provide Conversion Services, continued

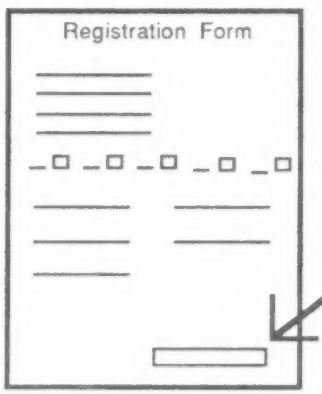
3. A considerable portion of the patron database consists of obsolete records, which would be replicated in the new system, consuming unnecessary disk space.

4. If the library plans to create library cards from this database with delivery to the patrons, there is a delivery problem in having the patron appear at the location where his/her, library card will be provided. Moreover, there will be considerable quantities of cards produced which will never be claimed.

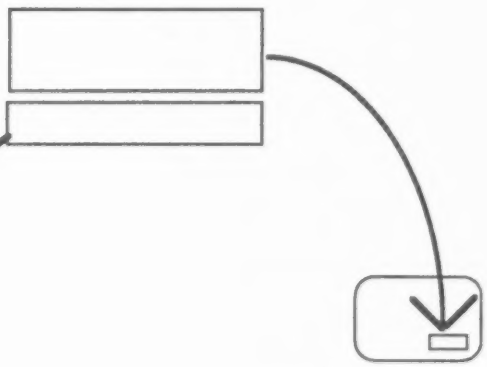
Process III: Re-register All Patrons From Existing Paper Files, With Direct Keying Of Patron Information

OPTION A, USING EXISTING EXISTING PATRON FILES

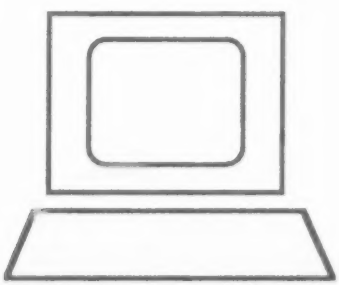
1. Staff uses existing registration forms to obtain patron information.



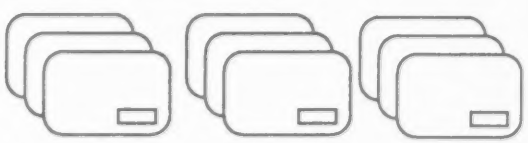
2. Staff affixes double labels; barcode on patron card, human-readable label to registration form.



3. Clerk later enters all data at terminal.



4. Staff collects all cards and distributes them from circulation desk.



PROCESS III: CREATING THE PATRON DATABASE FROM EXISTING PAPER PATRON RECORDS

Option A, Keystroking This Information from Patron Data Files

ADVANTAGES:

1. The time to create the patron database is reduced, thereby permitting the library to begin circulation operations more promptly. This is especially true if the library is able to obtain special vendor-supplied data collection software before the system is installed.

2. The library would be able to include its currently delinquent patrons for blocking in the new system, if it used a database from a previous system.

DISADVANTAGES:

1. A considerable portion of the patron database consists of obsolete records, which would be replicated in the new system, consuming unnecessary disk space.

2. If the library plans to create library cards from this database with delivery to the patrons, there is a delivery problem in having the patron appear at the location where his/her, library card will be provided. Moreover, there will be considerable quantities of cards produced which will never be claimed.

Planning, Procurement & Maintenance

Planning

Long Range Plan

Conversion Questions

Procurement

Background

Request for Proposal

Compilation

Evaluation

References

Contract

Planning

When preparing for a conversion project the library staff must study literature concerning conversion, set goals and make decisions which they determine are best for their situation.

These decisions must be made in conjunction with plans dealing with the overall automation project.

One of the first steps when preparing for a project is writing the Long Range Automation Plan.

Long Range Plan

* What are the goals and objectives that are planned for the automation project and the retrospective conversion project?
* Which areas will be automated first?
* When do we intend to purchase an automated system?
* What is the total funding available for the project?
* Will it be necessary to cut other budgets in order to purchase the system?
* Is there a set time table for the project?
* How much of the collection will be converted before installing the local system?

* Over the next ten years, what other aspects of automation would we consider adding to the core system?
* Will our system be shared with any other area libraries?
* How will we plan for the purchase of a future system?

Once these questions are answered, it is easier to pull together the final long range planning document. Once the LRP document is completed, the retrospective project must be considered specifically. Since the local database makes up the core of any automated system and since you want to be able to use the same database through system upgrades and changes, it is extremely important that the database be carefully planned and constructed. Questions such as these must be addressed:

* Why is the conversion project being considered?
* When was the collection last weeded?
* When was the collection last inventoried?
* If the retrospective conversion project was done in-house, would there be sufficient staff?
* Is there the possibility of having any volunteers to help in the conversion project?
* When should the card catalog be "closed"?
* Is there a preferred method of conversion?
* What is the quality level that will be desired in the converted records?

* In general, does the library have more $ or time?
* How much (and which areas) of the collection must be converted before the automated system is installed?
* Is the information on the shelflist complete enough to use in the conversion?
* How closely will the project follow any existing standards for conversion?

After these questions have been addressed, it is time for information that can be used for the generation of a Request for Proposal document for Retrospective Conversion

Planning, Procurement & Database Maintenance

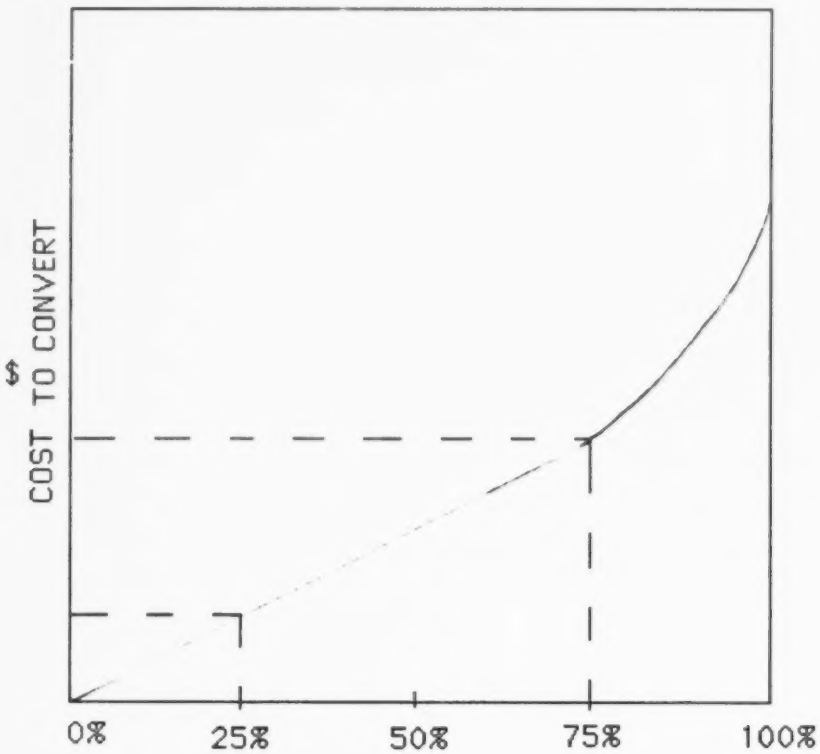


Illustration of a hypothetical library conversion project. The chart is used to plot the library's findings of the cost of conversion versus the percentage of the collection that must be converted before a circulation system or OPAC is installed.

Planning, Procurement & Database Maintenance

RFP Questionnaire

* Please provide a general description of the library.
* When will the RFP be distributed? _____
* When will the RFP be due? _____
* When will the project begin? _____
* How many cataloged books & monographs are in the collection? _____ titles
* Of these, how many are:
  Pre-1968 Fiction:_____
  Pre-1968 Non-Fiction:_____
  Post-1968 Fiction:_____
  Post-1968 Non-Fiction:_____
* How many uncataloged books & monographs does the library have? _____
* Number of Serials/Periodicals Titles:_____
* Number of Audio-Visual Titles:_____
* To what address should the bids be sent?

  _____
  _____
  _____
  _____

* What subject headings does the library currently use? _____
* Is there a preferred method for conversion or would you like to receive various alternatives and compare costs?_____
* What percentage of your collection is in a language other than English? _____%
* How are books cataloged presently?

Procurement

Background

Once the planning stage is completed, and you have made progress on any activities that had to be completed before your project, (an inventory for example) you are ready to embark on the procurement area of the project. This area will culminate with the signing of a contract for the procurement of conversion services. First, however, it is important to get to know as much as possible about the methods of conversion and the vendors involved. Helpful in this area are:

* Literature searches
* Speaking to libraries who have recently converted their collections.
* Visiting with vendors at TLA, ALA or another large conference
* Visiting libraries where conversion projects are underway

Request for Proposal

Compile & Send the RFP :Since you have completed the RFP questionnaire, you should have most of the information necessary to compile an RFP. An example of an RFP is included for your perusal. If you have no real preference as to the method of

conversion, it is common to send RFP's to all vendors. It is rare that all vendors will respond to all RFP's however, since there is the possibility of many replies, be prepared to evaluate them. Keep in mind that it is not always necessary to send an RFP. If you feel you can get the information you need from a vendor without the formal RFP process that is an acceptable method as well.

Evaluate & Compare: Once you receive the responses, carefully evaluate the responses and separate out the different methods used to perform the conversion. Next, compare the costs and benefits of each of the proposals, keeping in mind your local staffing and existing hardware environment. The cost sheets included in this workbook may be helpful in illustrating specific items. In general, when evaluating the proposals it is important to look for one vendor who balances and optimizes these factors:

*Service bureau costs to the library
*Inhouse costs to the library
*Time necessary for conversion
*Accuracy, completeness and commonality of the resulting converted records

Call References: Finally, it is extremely important to call references for the different vendors (or at least the top three or four) in order to get as much background on them as possible. Even if you choose

not to send an RFP, you should call references as part of your procurement process.

Contract: Once you have decided on the vendor, you should look over the contract of services carefully before signing to assure that it meets your needs as well as the vendor's.

Request for Proposal

for

Bibliographic Retrospective Data Conversion Services

Issued by the

Hometown Library

Hometown, Texas

Prepared by

C. Rebecca Garcia
Texas State Library
P.O. Box 12927
Austin, Texas
78711

May 13, 1988

INTRODUCTION

An Overview of Hometown Library:

The Hometown Library is located in Hometown, Texas. Hometown is a city of 75,000 with the primary economy being related to oil, agriculture and manufacturing. A University, retirement facilities and the tourist industry also have a significant effect on the local economy.

The Homeown Public Library was originally housed in a Carnegie building in downtown Hometown. After numerous fund-raising activities and a bond election, a new library was built in 1983.

In 1988, there were 20,000 adult patrons and 8,000 juvenile patrons registered.

The library also serves the local university were there are programs in the arts, sciences, teacher education, nursing education, business administration and courses designed to meet entrance requirements for professional schools of dentistry, engineering, law and medicine. There are eighteen fields of study at the graduate level.

The library is housed in a two story, 40,000 square foot building.

Present holdings are 86,350 cataloged books, 50,000 bound periodicals, 80,300 items in government documents, 400,000 microforms and 500 audio visual materials. The library subscribes to approximately 500 periodicals.

The library staff consists of four professional staff and 8.5 FTE clerical staff as well as student pages.

The library uses OCLC for cataloging and a microcomputer software program for online database searching.

The library seeks to automate in order to offer better services to library users but not to reduce staff size, which is already too small to handle present needs.

Planning, Procurement & Database Maintenance

Retrospective Conversion Project:

In preparation for the purchase of a turnkey automated library system in FY 1989.

The Hometown Library of will shortly begin a retrospective data conversion project in preparation for the purchase and installation of an automated integrated library system. This document invites interested firms to propose to the library a procedure(s) to accomplish this data conversion process. Due to library staff size, the preferred method of retrospective conversion is to contract out this service to a data conversion vendor rather than completing this process in-house. The timetable for the project is as follows:

9/2/88	Request for Proposals distributed to data conversion service bureaus.
10/14/88	Proposals due
11/88	Data conversion contract secured. Data conversion begins.

C. Rebecca Garcia, automation consultant at the Texas State Library, has been engaged to assist the Hometown Library in the planning of this retrospective conversion project and, at a later date, the procurement and installation of the automated library system.

Planning, Procurement & Database Maintenance

Collection Profile:

The following is a general profile of the Hometown Library collection to be converted as of March 24, 1988:

	Volumes	Titles
Book & Monographic Titles		86,350
• Pre-1968 Fiction	12,000	10,000
• Pre-1968 Nonfiction	10,000	8,500
• Post-1968 Fiction	42,000	35,850
• Post-1968 Nonfiction	34,000	32,000
Serials/Periodicals Titles		N/A
Audio Visual Titles		450
TOTAL COLLECTION SIZE (to be converted)		**86,800**

Planning, Procurement & Database Maintenance

SECTION #1: GENERAL INFORMATION

1. List the names and size of each of the databases that the vendor proposes to use as a part of this project*:

   DB Name: _____ Approx. Size: _____

   DB Name: _____ Approx. Size: _____

   DB Name: _____ Approx. Size: _____

   DB Name: _____ Approx. Size: _____

   (* When database consists of records from member libraries, list all academic libraries which have contributed records.)

2. For each database mentioned in response to Question #1, indicate the following:

   2.1 Are the records in the full MARC format?

   2.2 Are the records cataloged according to AACR II?

   2.3 Do the records use only Library of Congress Subject Headings?

   2.4 Will the library have clear copyright ownership in using the records for any purpose?

3. Given the number of Hometown Library records to be converted, propose a timeline for completion of the project. [Can the entire project be completed within a 6 month period, after the contract is established?]

4. Please provide a narrative description of the step-by-step process your firm recommends be followed to accomplish the retrospective conversion project. Should more than one (1) approach be possible using your firm, each alternative should be described separately and labeled (ALTERNATIVE #1..., ALTERNATIVE #2..., etc.). This description should include a description of how 'non-hits' can be added to the machine readable database.

5. How would the vendor propose that the Hometown Library keep the database updated with new acquisitions once retrospective conversion is completed and before the database could be loaded onto the local integrated automated library system?

Planning, Procurement & Database Maintenance

SECTION #2: COST INFORMATION

Supply answers to the questions on this form for each of the proposed data conversion alternatives presented in response to Section 1 (General Information) of this Request For Proposals. Should the vendor have provided multiple alternatives, this form should be photocopied and a separate form completed for each alternative presented. Please make sure the form for each alternative is clearly labeled.

1. List the 'hit' fees or royalty charged to be paid by the Porter Henderson Library for each of the proposed vendor databases:

DB name: _____ @ $0. _____ per record hit

DB name: _____ @ $0. _____ per record hit

DB name: _____ @ $0. _____ per record hit

DB name: _____ @ $0. _____ per record hit

DB name: _____ @ $0. _____ per record hit

DB name: _____ @ $0. _____ per record hit

(continue on reverse, if necessary)

Planning, Procurement & Database Maintenance

2. What is the per search key charge when no 'hit' is made with the vendor databases?

DB name: _____ @ $0._____ per miss/no hit

DB name: _____ @ $0._____ per miss/no hit

DB name: _____ @ $0._____ per miss/no hit

DB name: _____ @ $0._____ per miss/no hit

DB name: _____ @ $0._____ per miss/no hit

(continue on reverse, if necessary)

3. The vendor should clearly state the anticipated 'hit rate' for each database recommended for this project. Also, if multiple databases are to be searched, what is the recommended priority sequence the library should follow?

4. List [and provide an example] of each type of search key allowed and the corresponding cost, per record 'hit' or per search, for that type of search.

5. List each of the local information fields (Library classification number, accession number, etc.) which can be added to a record from the vendor database and the charges associated with adding that information.

Planning, Procurement & Database Maintenance

6. What is the cost to print out all of the records 'hit' on vendor databases for the purposes of editing and review? Please describe the organization (author, title, call number, etc.) and specific information that would be provided for each 'hit' or provide an example printout.

7. What is the cost to print out all of the search keys which resulted in 'no hit' on vendor databases? Please describe the organization (author, title, call number, etc.) and specific information that would be provided for each 'no hit' or provide an example printout.

8. What is the cost of the vendor eliminating duplicate search keys prior to conducting a search of the vendor databases (to prevent duplicate records)?

9. Please attach a proposed contract for this project.

10. List (itemized) all hardware purchase, lease, or rental costs proposed for this project. List all hardware maintenance costs, where appropriate.

11. List all software costs (not including record royalty charges) connected with the proposed conversion method(s).

Planning, Procurement & Database Maintenance

12. Please list any and all charges or costs associated with the proposed alternative(s). This shall include, but not be limited to, the following. (use reverse of page, if necessary).

    12.1 Setup charges.

    12.2 Online database storage (Library database).

    12.3 Telecommunications.

    12.4 Processing fees (reports, sorting, updating, etc.).

    12.5 Manuals & documentation.

    12.6 Supplies.

    12.7 Installation.

    12.8 Training.

    12.9 Mailing/handling.

    12.10 Insurance

    12.11 Management and contracting fees.

13. List all costs associated with name authority control processing.

14. List all costs associated with subject authority control processing.

SECTION 3: REFERENCES

Please list three library references who can provide (Name of Library) staff with information about your services. Each reference should include the (a) name and address of the institution, (b) telephone number, and (c) name of the data conversion project manager or someone else who can respond to specific content questions about the project. References provided should be limited to those projects completed during or since 1986.

If the vendor has provided machine-readable records to libraries that have successfully loaded these on minicomputer-based turnkey systems it would be best to include these as references.

REFERENCE #1:

REFERENCE #2:

REFERENCE #3:

SECTION 3: REFERENCES

Please list three library references who can provide (Name of Library) staff with information about your services. Each reference should include the (a) name and address of the institution, (b) telephone number, and (c) name of the data conversion project manager or someone else who can respond to specific content questions about the project. References provided should be limited to those projects completed during or since 1986.
If the vendor has provided machine-readable records to libraries that have successfully loaded these on minicomputer-based turnkey systems it would be best to include these as references.

REFERENCE #1:

REFERENCE #2:

REFERENCE #3:

SECTION 4: QUESTIONS

Questions about this document or the retrospective conversion project should be directed to one of the two individuals below:

Mary Jo Johnson, Library Director

Hometown Library

26 West Avenue A

Hometown, Texas 77444

(512) 963-5464

C. Rebecca Garcia

Library Development Division

Texas State Library

P.O. Box 12927

Austin, Texas 78711

(512) 463-6627

Planning, Procurement & Maintenance

Procurement

Life After the Signature

Prepare

Document Procedures

Monitor Project

Plan for Extraction

After You Sign the Contract

After the method and vendor have been determined, the vendor will have specific instructions for you to follow. These vary between vendors but in any project certain elements remain fairly stable. The library should:

Prepare: This can include gathering unique numbers for match by the vendor, photocopying the shelflist, training staff, etc.

Compile Procedures: Consistency is the key to success in this endeavor. Document your actions and note any discrepancies as you work on the project. This is where you must include information concerning fullness of the record and other "quality" concerns. Excerpts from the procedures of a retrospective conversion and an ongoing authority control project are included in the workbook as illustrative samples.

Monitor the Project Carefully: In the case of in-house conversions, this should be relatively easy. However, if conversion is being done outside, it is necessary to study any progress reports provided by the vendor and maintain close contact with them to assure that deadlines and specifications are met.

Planning, Procurement & Database Maintenance

Plan for Extraction: When you have chosen the automation system vendor, plan for the extraction of your records to correspond closely with the installation of system software and training on the system.

UNIVERSITY OF SOUTH FLORIDA LIBRARY

Cataloging Department

NOTIS Authority Control Procedure

May 18, 1988

This is the authority control procedure to be followed by Tampa Campus Library Catalogers and Cataloging Department LTAs. Questions/comments regarding any aspect of this procedure should be directed to the Authority Maintenance Unit: Diana, Vicki, and Larry.

This procedure is to be followed for every personal and corporate name heading encountered during the processing of all cataloging. Authority records are required on fields of 100, 110, 130, 600, 610, 630, 651, 700, 710 and 730. The only 130, 630, and 730 fields necessary are those for sacred scriptures and anonymous classics.

1. Search name heading in OCLC Authority File.

2. Is the name a literary author?

   yes - Check the manual NAF. Copy down the lit #, if it exists. If it does not exist, follow the cataloging procedure, establish the lit # and Go to 3

   no - go to 3

3. Name in OCLC Authority File?

   yes - go to Procedure A

   no - go to Procedure B

University of South Florida Library

Procedure A (name in OCLC Authority File)

1. Search name in USF NOTIS Authority File.

   LTSF if na <search parameter>

2. Authority record in NOTIS?

   yes - go to 3

   no - checkmark "INTERFACE" on the slip (or write on the OCLC printout "INTERFACE"), and initial, date, and put the OCLC printout in the INTERFACE/OVERLAY basket. Write down the lit # for 053 field (*) and supply the additional cross references if needed. Accept the OCLC name authority and go on to the next heading.

3. NOTIS authority matches OCLC authority perfectly (010, 053, 1xx-5xx)?

   yes - go to 4

   no - go to 7

4. "690" field with initials, date, and campus?

   yes - Add local 053 (*) and additional cross reference if necessary. go to 5

   no - go to 6

5. No further work necessary. Accept the name authority, discard the OCLC printout and to next name heading.

6. a. Add 053 (*) field with local literature number with !c tamp if needed. Add additional cross-references if they are on the printouts. Create a "690" field and key into it your initials, date, and tamp.

   b. Checkmark "OK" on the slip (or write on the OCLC printout "OK"), initial and date and put it in the "OK" basket.

   c. Accept the name authority and proceed to your next name heading.

7. NOTIS 010 field matches OCLC 010 field (are they the same? Compare digit by digit)?

   yes - go to 8

   no - go to 9

SHELFLIST PROCEDURE

1. GENERAL

1.1 Freeze particular shelf list drawer being converted. No items should be added or removed until the drawer is fully converted.

1.2 Additions to the collection will be filed if they fall in the white-labelled (unconverted) drawers. If they fall in the dotted or pink-labelled (converted) drawers or in the drawers in the process of being converted, they must be converted before being filed.

1.3 Shelflist cards which are updated (change in call number, location, addition or deletion of copies, or any other change to shelflist), will treated as follows:

CONVERTED:	*Must be recorded on Record Update Ledger before re-filing.*
UNCONVERTED:	*May be re-filed.*

1.4 After workstation has moved to another location, photocopies of shelflist cards of additions to the collections should be sent to Mr. Bibi for conversion. Mr. Bibi will inform librarians of those items which require original entry. Librarians will enter cataloging information on the MARC forms provided and return filled forms to Mr. Bibi for entry.

1.5 Items to be updated will be referred to Mr. Bibi.

1.6 Converted items deleted from the shelflist will be stamped "withdrawn" and kept in a separate drawer until further notice.

2. BCLS SHELFLIST ONLY

2.1 The following abbreviations are used to indicate the branch holding a copy or copies of an item:

Branch	*Abreviations*
Alvin	*A or Al*
Angleton	*T or CEN or blank*
Brazoria	*B or Br*
Clute	*C or Cl*
Freeport	*F or Fpt*
Lake Jackson	*L or LJ*
Manvel	*M*
Pearland	*P or Pl*
Sweeny	*S or Sw*
West Columbia	*W or WC*

2.2 Where there is a string of successive abbreviations, the last one given indicates the branch currently holding the item.

2.3 When a branch stamp is preceded or followed by any of the following, the item is no longer held and should not be included on the converted record:

CR (usually followed by a date, as in CR64).
(Line drawn through item)
Lost
Missing
Msg
Paid
Pd
Reclassified to...
Snag
Storage
WD
Withdrawn

2. BCLS SHELFLIST ONLY (CONT.)

2.1 The following stamps are part of the call number. They usually appear above the classification number on the upper left corner of the shelflist card. In some cases, however, they may appear on the upper right side of the card. When these stamps appear on on the shelflist card, enter them in the 090 field proceeding the call number.

Example:
Local call # 090 -- ǂaREF 220.1 GRA

B	*(Biography)*
E	*(Easy)*
CAS	*(Cassette tape)*
GEN	*(Genealogy, usually followed on the next line by a state abbreviation, as TEX. Enter this in the 090 field as follows: 090 -- ǂaGEN TEX 976.4 JAS*
J	*(Junior)*
LT	*(Large Type. Usually appears on upper right side of card)*
M	*(Mystery)*
R or REF	*(Reference) Use REF.*
SC	*(Story Collection)*
SF	*(Science Fiction)*
SS	*(Short Story)*
SP	*(Spanish Language)*
T or TX	*(Texas -- Do not use for fiction). Use TX.*
W	*(Western)*
YA or ya	*(Young Adult. Small "ya" often appears on upper right side of card). Use YA.*

2. BCLS SHELFLIST ONLY (CONT.)

2.5 The following are adult fiction call numbers used by BCLS:

F	*M*	*W*	*SS*	*SF*
YA	*YA*	*YA*	*YA*	*YA*
F	*M*	*W*	*SS*	*SF*
SP	*SP*	*SP*	*SP*	*SP*
F	*M*	*W*	*SS*	*SF*
LT	*LT*	*LT*	*LT*	*LT*
F	*M*	*W*	*SS*	*SF*

CAS (for books on casstte) may precede any call number.

Call numbers will always be followed by a space and the first three letters of the author's last name. Type the call number in capital letters in the 090 field.

EXAMPLES:

```
Local call #      090 -- ǂaF HEM
Local call #      090 -- ǂaCAS M CHR
Local call #      090 -- ǂaLT F PIE
Local call #      090 -- ǂaW LAM
```

2.6 The following call numbers are used for Junior and Easy fiction:

J	*SC*	*E*
F		

Junior (J) and Story Collection (SC) are always followed by a space and the first three letters of the author's last name. Easy (E), however, is followed by a space and only the first letter of the author's last name. Type call numbers in capital letters in the 090 field.

EXAMPLES:

```
Local call #      090 -- ǂaJ F BRA
Local call #      090 -- ǂaSC GRO
Local call #      090 -- ǂaE H
```

Planning, Procurement & Maintenance

Maintenance

Bibliographic Maintenance

Changes/Additions on Bibliographic Utility

CD-ROM System

Software Package

Input on Local System only

Maintenance

To insure transportability and continued usefulness of your database it is extremely important to retain and update the MARC records with copy information. Also, MARC records should be added to your system on an ongoing basis for new materials.

Methods of Bibliographic Database Maintenance

* Make changes/additions on a bibliographic utility (batch or online), interface with the local system to add the records. May have to pay for storage online if the local system cannot output MARC.
* Use a CD-ROM based cataloging system, store and update records inhouse. Include barcode information for maximum usefulness.
* Use a software package that creates a MARC format on the screen and originally catalog records on your system.
* Input original records on the local system only. This can be a problem if your local system cannot output MARC.

Planning, Procurement & Maintenance

Maintenance

Authority Control Maintenance

Tape

Bibliographic Utility

Local System

CD-ROM

Re-Authorize Entire Database

Methods of Authority Control Maintenance

Authority control maintenance is also an important concern. Different vendors offer different methods of keeping this information current. The larger local automation vendors usually offer some type of authority control as well. Excluding the local options, authority control currency can be maintained by:

* Ongoing Authority Control on Tape:
  Purchase updates to original authority work or complete LC authority tapes as these are published and load on local system.
* Ongoing Authority Control Utilizing Bibliographic Utility:
  Contract with the same bibliographic utility which completed the original batch authority tape processing for ongoing cataloging and updates to older authority records.
* Ongoing Authority Control Using Local System:
  Use local system to note subject headings or names that are not on the system as yet. Must attempt to manually keep track of newest headings before entering these into system.
* Purchase CD-ROM LC name & subject headings and use this system to keep up with changes.
* Update Entire Database:
  Periodically download entire database and submit for renewal of authority control.

Outline of Tasks in a Data Conversion Project

Task Chart

The following is a general outline of tasks to be followed in order to convert the holdings of your library and be ready to go online with your local system. Further information concerning data conversion-related steps is covered in the workshop or is addressed in other areas of the workbook. Since the size, scope and type of retrospective conversion projects varies greatly, not all projects will require all steps. Likewise, some projects will necessitate additional steps not noted here. This plan is designed to be starting point and not a precise, all-inclusive set of procedures for every project. Keep in mind that this task outline covers only the data conversion aspects of the library automation process or those parts of the general automation project that are milestones in the conversion process as well. A step-by-step outline for an entire automation project would include many additional concerns that are not included here.

NOTE: When listed in columns, these tasks can be completed at the same time. When indicated by "or" it is necessary to choose one method (column) over the other.

Data Conversion Task Chart

1. Appoint automation committee
2. Plan (Write LRP, inventory/weed, add unique numbers,etc.)
3. Consider methods for retrospective conversion
4. Appoint project manager
5. Address issues of standards & quality
6. Write RFP to choose method/vendor
7. Choose method & vendor

Outline of Tasks in a Data Conversion Project

Tasks 8 - 13: choose column "a" or column "b"

If sending out:	If in-house:
8a. Copy SL or unique numbers	8b. Complete profiling as needed.
9a. Complete profile of specifications	9b. Hire/assign personnel
10a. Send original file to vendor	10b. Install Equipment
11a. Monitor project	11b. Train supervisor
12a. 1st pass complete - check "no-hits"	12b. Complete Procedures
13a. Continue "no-hits" with original cataloging	13b. Train Staff
14a. 2nd pass complete	14b. Begin Project
15a. Store records	15b. Re-write procedure
	16b. 1st pass complete
	17b. 2nd pass complete
	18b. Large Percentage or most important sections complete

V V

19. Choose Local Automation Vendor

Outline of Tasks in a Data Conversion Project

20. Order "Dumb" labels (for entire collection or new books only)

21. Schedule record extraction

Conduct all of these tasks (unless specifically noted w/ "or") at the same time:

22a. De-duplicate records (if necessary)	22b. Install system (HW & SW)	22c. Design/order new patron cards
23a. AACRII flip/019 resolution (if necessary)	23b. Train staff on local system	23c. Design patron registration form
24a. Authority control processing	24b. Write procedures for bar-coding project	24c. Determine rules for new system

Tasks 25 & 26: choose a. or b. (along with step c.)

25a. Order Item Conversion Tape(if desired) **or**	25b. Load tape	25c. Begin patron re-registration/ tape load
26a. Smart label tape generated/order labels **or**	26b. Begin application of dumb labels	26c. Load Bibliographic & item tape (if not done before)
27a. Hire additional staff /schedule volunteers for barcoding project	27b. Write new Circulation procedures	27c. Write OPAC "Help" info

Outline of Tasks in a Data Conversion Project

28. Index records for OPAC

29. Receive & Check barcodes (put in order, make sure they scan).

30. Test Barcoding procedures

31. Re-write procedures

32. Schedule & Train Labellers

33. Label Collection/Pull Problems

34. Label majority of collection/Deal with problems on ongoing basis.

35. Begin Circulation/OPAC

RETROSPECTIVE CONVERSION				YEAR ONE		YEAR TWO	
COST FACTORS	UNIT COST	QUANTITY	TOTAL	NEW	-ABSORBED	NEW	ABSORBED
1. MEMBERSHIP FEES							
2. HARDWARE							
* TERMINALS							
* MICROCOMPUTERS							
* MODEMS							
* CABLING							
* CD-ROM DRIVES							
* HARD DRIVES							
* TAPE BACK-UP SYSTEMS							
* PRINTERS							
3. TELECOMMUNICATIONS							
* PHONE LINES							
-INSTALLATION							
-MONTHLY FEES							
-USAGE FEES							
4. ACCESS FEES							
* RETROCON							
* NO-HITS/2ND CHK							
* NEW CATALOGING FEE							
5. EXTRACTION FEES							
*PER RECORD							
*TAPE FEE							

RETROSPECTIVE CONVERSION				YEAR ONE		YEAR TWO	
COST FACTORS	UNIT COST	QUANTITY	TOTAL	NEW	ABSORBED	NEW	ABSORBED
6. DE-DUPLICATION FEE							
7. AACRII FLIP FEE							
8. AUTHORITY CONTROL							
*NAME							
*SUBJECT							
*UPDATES							
9. SET-UP CHARGES							
*INITIAL							
10. ONLINE DATABASE STORAGE							
11. MAINTENANCE (HW & SW)							
12. DOCUMENTATION							
13. TRAINING							
14. INSTALLATION CHGS.							
15. SUPPORT FEES							
16. SUPPLIES							
*PAPER							
*RIBBONS							
*DISKETTES							
*TAPES FOR BACKUP							

RETROSPECTIVE CONVERSION				YEAR ONE		YEAR TWO	
COST FACTORS	UNIT COST	QUANTITY	TOTAL	NEW	ABSORBED	NEW	ABSORBED
17. LABOR							
*CLERICAL STAFF							
*PROFESSIONAL STAFF							
* STUDENT WORKERS							
* VOLUNTEERS							
18. SOFTWARE/OTHER PRODUCTS							
*SOFTWARE							
*CD-ROM CONVERSION PRODUCTS							
*CD-ROM AUTH. CON. PRODUCTS							

PATRON CONVERSION				YEAR ONE		YEAR TWO	
COST FACTORS	UNIT COST	QUANTITY	TOTAL	NEW	ABSORBED	NEW	ABSORBED
1. LABOR							
*STAFF							
-REGISTRATION							
- DATA ENTRY							
*PROFESSIONAL							
2. PROGRAMMING FEES							
*IN-HOUSE							
*OUTSIDE VENDOR							
3. MATERIALS							
*BARCODES							
-SET-UP							
-COST/LABEL							
*PATRON CARDS							
-DESIGN							
-LAYOUT/CAMERA COPY							
-SET-UP							
-PRINTING							
4. REGISTRATION FORMS							
*DESIGN							
*PRINTING							

ITEM CONVERSION				YEAR ONE		YEAR TWO	
	UNIT COST	QUANTITY	TOTAL	NEW	ABSORBED	NEW	ABSORBED
1. ITEM INPUT							
*LABOR							
2. ITEM RECORD CREATION							
*PROGRAMMING FEE							
*ITEM CONVERSION							
3. ITEM LABELS							
*SMART LABEL TAPE							
*TAPE COST							
*BARCODE LABEL COST							
4. LABELLING PROJECT							
*PERSONNEL							
-PROFESSIONAL							
-STAFF							
-VOLUNTEERS							
*SUPPLIES							
5. PROBLEM RESOLUTION							
* LABOR							
-PROFESSIONAL							
-STAFF							
*SUPPLIES							
-BARCODES							
-FORMS							

ITEM CONVERSION	UNIT COST	QUANTITY	TOTAL	YEAR ONE NEW	YEAR ONE ABSORBED	YEAR TWO NEW	YEAR TWO ABSORBED
6. NEW ITEMS							
*LABELS							
*PERSONNEL							

Vendor Lists

TEXAS STATE LIBRARY

LIST OF DATA CONVERSION SERVICE FIRMS
(September, 1988)

AMIGOS Bibliographic Council, Inc.
11300 North Central Expressway
Suite 321
Dallas, TX 75243
(800) 843-8482

ATLAS Corporation
Library Services Division
6011 Executive Blvd.
Rockville, MD 20852
(800) 638-6595
(301) 770-3000

Auto-Graphics, Inc.
3201 Temple Ave.
Pomona, CA 91768
(714) 595-7204
(800) 325-7961
(800) 828-9585 CA only

Bibliofile
The Library Corporation
P. O. Box 40035
Washington, D. C. 20016
(800) 624-0559

Bibliographical Center for Research
4500 Cherry Creek Drive, South
Suite 206
Denver, CO 80222
(303) 691-0550

Blackwell North America
1001 Fries Mill Rd.
Blackwood, NJ 08012
(800) 257-7341
(609) 629-0700 NJ only
FAX: (609) 629-0438

-or-

Blackwell North America
6024 SW Jean Rd., Bldg. G
Lake Oswego, OR 97035
(800) 547-6426
(503) 684-1140 OR only
FAX: (503) 639-2481

Vendor Lists

Brodart, Inc.
Library Automation Division
500 Arch St.,
Williamsport, PA 17705
(800) 233-8467

-or-

Brodart, Inc.
Library Automation Division
1609 Memorial Ave., Williamsport, PA 17705
(800) 233-8467

California Library Authority for Systems and Services
(CLASS)
1415 Koll Circle
San Jose, CA 95112
(408) 289-1756

Carrolton Press, Inc.
REMARC Division
(SEE UTLAS)

The Computer Co.
1905 Westmoreland St.
Richmond, VA 23230
(804) 359-0193
(800) 327-5160

Electronic Keyboarding, Inc.
140 Weldon Parkway
Maryland Heights, MO 63043
(315) 576-1780
(800) 325-4984

Gaylord Bros.
(See Library Systems and Services, Inc.)

General Research Corporation
(Library Systems)
5383 Hollister Ave.
Santa Barbara, CA 93111
(800) 235-6788

Ingram Library Services, Inc.
347 Reedwood Drive
Nashville, TN 37217
(800) 251-5902
(810) 371-1092
FAX: (615) 793-3825

Vendor Lists

LIAS Program Office
E 111 Pattee Library
Pennsylvania State University
University Park, PA 16802
(814) 865-1818

Library of Congress
Office of Chief,
Cataloging Distribution Service
Washington, DC 20541
(202) 287-6120

Library Systems and Services, Inc.
Division of Gaylord Bros.
General Motors Bldg.
1395 Picard Dr., Suite 100
Rockville, MD 20850
(301) 258-0200
(800) 638-8725

Marcive, Inc.
P. O. Box 47508
San Antonio, TX 78265
(800) 531-7678
(512) 646-6161

MITINET
Information Transform, Inc.
502 Leonard St.
Madison, WI 53711
(608) 255-4800

OCLC, Inc.
Retrospective Conversion Service
6565 Frantz Rd.
Dublin, OH 43017-0702
(800) 848-5878

Pittsburgh Regional Library Center
Beatty Hall
Chatham College
Pittsburgh, PA 15232
(412) 441-6409

Research Libraries Information Network (RLIN)
The Rearch Libraries Group, Inc.
Jordan Quadrangle
Stanford, CA 94305
(415) 328-0920

Vendor Lists

SOLINET
Southeastern Library Network, Inc.
Plaza Level, 400 Colony Square,
1201 Peachtree St.
Atlanta, GA 30361
(404) 892-0943

University of Toronto Library Automation Systems
(UTLAS)
CATSSERVICES
80 Bloor St. W.
2nd Floor
Toronto, Ontario
Canada M5S 2V1
(416) 923-0890

-also-

UTLAS International
REMARC Division
8300 College Blvd.
Overland Park, KS 66210
(800) 338-8527
(913) 451-3111

Western Library Network Computer Service (WLN)
Washington State Library
Batch Retrospective Conversion
AJ-11
Olympia, WA 98504
(206) 459-6539
(800) 342-5956

Vendor Lists

OCR LABEL VENDORS:

A SELECTED LIST

Appleson Press, Inc.,
1120 Old Country Rd., Plainview, NY 11803; (516) 937-6280, (800) 888-APPLE;
New York Showroom: 305 Madison Ave., Suite 2140, New York, NY 10017; (212) 972-5255

Data Composition, Inc.
1009 Essex, Richmond, CA 94801; (800) 227-2121, CA only (415) 232-6200

Davis + Henderson Ltd.,
66 NorthLine Road, Toronto, Ontario, Canada M4B 3E5; (416) 752-6775

Gaylord Bros.,
P. O. Box 4901, Syracuse, NY 13221-4901; (800) 448-6160

The Highsmith Co., Inc.
W5227 Hwy 106, P. O. Box 800, Fort Atkinson, WI 53538; (414) 563-9571

Sirsi Corp.
2904 Westcorp Blvd., Suite 209, Huntsville, AL 35805; (205) 536-5881

Watson Label Products,
3684 Forest Park Boulevard, St., Louis, MO 63108; (314) 652-6715

(Many of these companies are in the process of expanding their product lines.
Please inquire regarding other related products and services.)

Vendor Lists

BARCODE LABEL VENDORS:

A SELECTED LIST

Appleson Press, Inc.,
1120 Old Country Rd., Plainview, NY 11803; (516) 937-6280, (800) 888-APPLE;
New York Showroom: 305 Madison Ave., Suite 2140, New York, NY 10017; (212)
972-5255

Bar Code Applications
810 Peace Portal Way, #113, Blaine, WA 98230; (604) 682-5497

Catalog Card Corp of America
P. O. Box 1276, Burnsville, MN 55337; (800) 328-2923, or in MN or Canada (612)
894-5770

CLSI, Inc.
320 Nevada St., Newtonville, MA 02160; (617) 965-6310 or (800) 225-3076; FAX
(617) 969-1928

The Computer Co.,
1905 Westmoreland St., Richmond, VA 23230; (804) 359-0193 or (800) 327-5160

Data Composition, Inc.
1009 Essex, Richmond, CA 94801; (800) 227-2121, CA only (415) 232-6200

Data Document Systems,
301 Gardner Drive, P. O. Box 30, Industrial Airport, KS 66031; (800) 722-7295

Data Recall, Inc.
1711 Dell Ave., Campbell, CA 95008; (408) 354-7555; FAX (408) 379-9074

Data Symbology
P. O. Box 18077, Rochester, NY 14618; (716) 442-3152

Data Trek, Inc.
167 Saxony Rd., Encinitas, CA 92024; (619) 436-5055 or (800) 875-5484

Davis + Henderson Ltd.,
66 NorthLine Road, Toronto, Ontario, Canada M4B 3E5; (416) 752-6775

Demco Inc.,
P. O. Box 7488, Madison, WI 53707; (608) 241-1201 or (800) 356-1200; FAX (608)
241-1799

Follett Software Co.,
4506 Northeast Hwy., Crystal Lake, IL 60014; (815) 455-4660 or (800) 323-3397

INLEX, Inc.
P. O. Box 1349, Monterey, CA 93942; in CA (408) 646-9666 or (800) 553-1202

Vendor Lists

BARCODE LABEL VENDORS:

A SELECTED LIST

(continued)

MDSI
115 S. Oak St., Falls Church, VA 22046; (703) 532-8128

NSC, Inc.
207 S. Main St., Brillion, WI 54110; (414) 756-5305

Seton Name Plate Co.,
P. O. Box 1331, New Haven, CT 06505; (800) 243-6624

Sirsi Corp.
2904 Westcorp Blvd., Suite 209, Huntsville, AL 35805; (205) 536-5881

SOLINET
Southeastern Library Network, Inc.,
Plaza Level, 400 Colony Square, 1201 Peachtree St., Atlanta, GA 30361; (404) 892-0943

Universal Library Systems
2209-B Elm St., Bellingham, WA 98225; (206) 733-1732 or (604) 926-7421

Watson Label Products,
3684 Forest Park Boulevard, St., Louis, MO 63108; (314) 652-6715

Western Publishing Co.
510 Highway 175, O'Fallon, MO 63666; (304) 272-7820

(Many of these companies are in the process of expanding their product lines. Please inquire regarding other related products and services.)

Vendor Lists

PLASTIC LIBRARY CARD VENDORS

A SELECTED LIST

Brodart,
500 Arch St., Williamsport, PA 17705; 1609 Memorial Ave., Williamsport, PA 17705; (800) 233-8467

Credit Card Systems
190-A Shepard Drive, Wheeling, IL 60090; (312) 456-8320

Data Composition
1099 Essex, Richmond, CA 94801; (415) 232-6200

Data Document Systems,
301 Gardner Drive, P. O. Box 30, Industrial Airport, KS 66031; (800) 722-7295

Data Symbology
P. O. Box 18077, Rochester, NY 14618; (716) 442-3152

Data Trek, Inc.
167 Saxony Rd., Encinitas, CA 92024; (619) 436-5055 or (800) 875-5484

Davis + Henderson Ltd.,
66 NorthLine Road, Toronto, Ontario, Canada M4B 3E5; (416) 752-6775

Demco Inc.,
P. O. Box 7488, Madison, WI 53707; (608) 241-1201 or (800) 356-1200; FAX (608) 241-1799

Follett Software Co.,
4506 Northeast Hwy., Crystal Lake, IL 60014; (815) 455-4660 or (800) 323-3397

Gaylord Bros.,
P. O. Box 4901, Syracuse, NY 13221-4901; (800) 448-6160

Griffin Technology Incorporated,
6132 Victor-Manchester Rd., P. O. Box 0988, Victor, NY 14564-0998; (716) 924-7121

Larlin Corp.
P. O. Box 1730, Marietta, GA 30061; (404) 424-6210 or (800) 548-8778

The Library Store
P. O. Box 964, Tremont, IL 61568; (309) 925-5571

Malco Plastics
3717 Park Place, Montrose, CA 91020; (818) 248-8560

Moore Business Forms
(Contact Local Sales Representative)

Vendor Lists

PLASTIC LIBRARY CARD VENDORS:

A SELECTED LIST

(continued)

Plastic Graphic Co.
4646 N. Clifton Ave., Chicago, IL 60640; (312) 728-7760

Uarco Inc. Business Forms
(Contact Local Sales Representative)

Watson Label Products,
3684 Forest Park Boulevard, St., Louis, MO 63108; (314) 652-6715

Wingfoot Services
2677 Parley's Way, Salt Lake City, UT 84109; (801) 485-7788

(Many of these companies are in the process of expanding their product lines.
Please inquire regarding other related products and services.)

Bibliography

The following resources provide information on various aspects of the conversion of bibliographic data to machine-readable form. Related topics include authority control, barcoding, MARC formats, and the conversion of patron records. Most of the following materials are available for loan from the Library Science Collection. To borrow materials, call 1-800-252-9386 or 512/463-5494.

Association of Research Libraries, Office of Management Studies. Barcoding of Collections in ARL Libraries: SPEC Kit 124. Washington, D.C.: Systems and Procedures Exchange Center, May 1986.
LSC 025 Sp31 No. 124

Association of Research Libraries, Office of Management Studies. Catalog Maintenance Online in ARL Libraries: SPEC Kit 119. Washington, D.C.: Systems and Procedures Exchange Center, November-December 1985.
LSC 025 Sp31 No. 119

Association of Research Libraries, Office of Management Studies. Local Cataloging Policies: SPEC Kit 110. Washington, D.C.: Systems and Procedures Exchange Center, January 1985.
LSC 025 Sp31 No. 110

Association of Research Libraries, Office of Management Studies. Managing Copy Cataloging in ARL Libraries: SPEC Kit 136. Washington D.C.: Systems and Procedures Exchange Center, July-August 1987.
LSC 025 Sp31 No. 136

Association of Research Libraries, Office of Management Studies. Retrospective Conversion: SPEC Kit 130. Washington D.C.: Systems and Procedures Exchange Center, January 1987.
LSC 025 Sp31 No. 130

Beaumont, Jane. "Retrospective Conversion on a Micro: Options for Libraries." Library Software Review 4 (July-August 1986): 213-218.

Bibi, Abd M. and Karen West. Braznet Handbook. Angleton, TX: Brazoria County Library System, 1987.

Bibliography

Boss, Richard W. Options for Retrospective Conversion: Proceedings of the Class Symposium. Audio recording on 5 cassettes. 300 minutes. San Jose, CA: California Library Authority for Systems and Services, 1985.
LSC AC 209

Boss, Richard W., and Hal Espo. "Standards, Database Design, & Retrospective Conversion." Library Journal 16 (October 1, 1987): 54-58.

Carter, Ruth C., and Scott Bruntjen. Data Conversion. White Plains, N.Y.: Knowledge Industry Publications, Inc., 1983.
LSC 025.302854 C246d

Clark, Sharon E., and Winnie Chan. "Maintenance of an Online Catalogue." Information Technology and Libraries (December 1985): 324-338.

Crawford, Walt. MARC for Library Use: Understanding the USMARC formats. White Plains, N.Y.: Knowledge Industry Publications, 1984.
LSC 025.302854 C859m

Davis, Betty Bartlett. "The Great Barcoding Project." Library Hi-Tech 3 (1985): 67-69.

de Klerk, Ann. "Barcoding a Collection -- Why, When and How." Library Resources and Technical Services (January-March 1981): 81-87.

Drabenstott, Jon, editor. "Retrospective Conversion: Issues and Perspectives." Library Hi Tech 14 (1986): 105-120.

Epstein, Susan Baerg. "Automated Authority Control: A Hidden Timebomb? Part 1." Library Journal (November 1, 1985): 36-37.

Epstein, Susan Baerg. "Automated Authority Control: A Hidden Timebomb? Part 2." Library Journal (January 1986): 55-56.

Epstein, Susan Baerg. "Converting Bibliographic Records for Automation: Some Options." Library Journal (March 1, 1983): 474-476.

Epstein, Susan Baerg. "Converting Records for Automation at the Copy Level." Library Journal (April 1, 1983): 642-643.

Bibliography

Epstein, Susan Baerg. "Implementation of an Automated System." Library Journal (October 15, 1983): 1934-1935.

Epstein, Susan Baerg. "Real Time and Automated Systems." Library Journal (May 1, 1987): 50-51.

Finn, Maureen D. "How to Prepare for Retrospective Conversion." Bulletin of the American Society for Information Science (April-May 1987): 23-24.

Franklin, Laurel F. "Preparing for Automated Authority Control: A Projection of Name Headings Verified." The Journal of Academic Librarianship (September 1987): 205-208.

Genaway, David C., editor. Conference on Integrated Online Library Systems Proceedings, Atlanta, Georgia, September 13-14, 1984. Canfield, OH: Genaway and Associates, Inc., 1984.
LSC 025.04 C76c 1984

Genaway, David C., editor. Conference on Integrated Online Library Systems; Proceedings, St. Louis, Missouri, September 23-24, 1986. Canfield, OH: Genaway and Associates, Inc., 1987.
LSC 025.04 C76c 1986

Grady, Agnes M. "Online Maintenance Features of Authority Files: Survey of Vendors and In-House Systems." Information Technology and Libraries (March 1988): 51-55.

Gregor, Dorothy, editor. Retrospective Conversion: Report of a Meeting Sponsored by the Council on Library Resources, July 16-18, 1984, Wayzata, Minnesota. Washington, D.C.: Council on Library Resources, 1984.
LSC 025.302854 R315 1984

Halliday, Caroline. "Reading Between the Lines." PC Magazine (June 28, 1988): 213-217.

Heilos, Larry; Vicki Grahame, and Diana Llang. "Planning for Online Authority Control: a Librarian's Checklist." ALA Poster Session Report (1988).

Bibliography

Juneja, Derry C. "Quality Control in Data Conversion." Library Resources & Technical Services (April-June 1987): 148-158.

Ludy, Lorene E., and Sally A. Rodgers. "Authority Control in the Online Environment." Information Technology and Libraries (September 1984): 262-266.

McQueen, Judy, and Richard W. Boss. "Sources of Machine-Readable Cataloging and Retrospective Conversion." Library Technology Reports 21 (November-December 1985): 601-732.
LSC PER.

MicroLIF Committee. "Minutes from the MicroLIF Committee Meeting & Additional Attachments." ALA National Conference (July 1988).
LSC Information Packet

OCLC Online Computer Library Center, Inc. Retrospective Conversion Guidelines for Libraries. Dublin, OH: OCLC, Inc., 1987(?).

Reed-Scott, Jutta. Issues In Retrospective Conversion: Report of a Study Conducted for the Council on Library Resources. Washington, D.C.: Council on Library Resources, Inc., 1984.
LSC 025.302854 R251i

Reed-Scott, Jutta. "Retrospective Conversion: An Update." American Libraries (November 1985): 694-698.

Rahn, Erwin. "Bar Codes for Libraries." Library Hi-Tech 6 (1984): 73-77.

Romero, Nancy, and Arnold Wajenberg. "Authority Records and Authority Work in the Online Catalogue. Information Technology and Libraries (December 1985): 318-323.

Schmidt, Sandy. "Retrospective Conversion Options." Action for Libraries (May 1987): 4-5.

Spalding, Helen H., et. al. "Behind Bars in the Library: Northwestern University's Bar Code Project." Information Technology and Libraries (September 1987): 185-189.

Bibliography

Spalding, Helen H. "Some Planning Considerations for Barcoding a Collection." Show-Me Libraries (July 1986): 11-15.

Valentine, Phyllis A., and David R. McDonald. "Retrospective Conversion: A Question of Time, Standards, and Purpose." Information Technology and Libraries (June 1986): 112-120.

Walton, Robert. Data Conversion, Getting Ready for Automation. Dallas, TX: AVW Audio Visual, Inc. (4 audio tapes): Texas Library Association, 1986.

Walton, Robert. Northeast Texas Library System Long Range Automation Plan. Austin, TX: Library Development Division, Texas State Library, 1985.

White, Howard S., editor. "Unique Numbers in Machine-Readable Cataloging." Library Systems Newsletter (May 1988): 34-36.

White, Howard S., editor. "Processing OCLC Tapes." Library Systems Newsletter (June 1988): 41-45.

Wood, Susan. Retrospective Conversion Procedure Manual for the Health Sciences Library. Chapel Hill, N.C.: Health Sciences Library, University of North Carolina at Chapel Hill, 1984.
LSC 025.39 W85r

Compiled by Anne Ramos, Librarian
Library Science Collection
Texas State Library